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american archaeology

SUMMER 2012

a quarterly publication of The Archaeological Conservancy

Vol. 16 No. 2



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Ancient Cities of Maritime Turkey (18 days)

Never far from the sea, Prof. Robert Stieglitz, Rutgers U., will guide us from Izmir and Ephesus along the Mediterranean and Aegean coasts to the ancient cities in Karia, Lycia and Pamphylia. We will sail by private gulet to Kekova and make day trips to the Greek islands of Samos and Kos. We will visit two of the Seven Wonders of the Ancient World as well as Cnidus, renowned in antiquity for its statue of Aphrodite. The tour ends with the Hellenistic cities of Perge and Aspendos and two days in Istanbul.



Splendors of Ancient Egypt in Two Weeks (15 days)

Discover Egypt's splendors with Prof. Lanny Bell, Brown U. Tour highlights include the Egyptian Museum, the Pyramids and Sphinx, our five days in Luxor exploring the temples and fabulous painted tombs, as well as Dendera and Abydos. A 5-day Nile cruise on the deluxe new M.S. Farah brings us to Edfu's Temple of Horus and Kom Ombo. The tour ends in Aswan and a flying visit to Abu Simbel.



Gujarat India (19 days)

Join Prof. Mark Kenoyer, U. of Wisconsin, as we visit some of India's most beautiful and least visited monuments. Tour highlights include ancient Indus Valley sites at Lothal and Dholavira, 863 marble Jain temples at Palitana, Ahmedabad's museums and step-wells and the holy Hindu shrines at Dwarka. We will take a break at the Sasan-Gir Lion Sanctuary and end our tour in the Rann of Kutch, exploring its colorful villages as well as the exotic bazaars of the walled city of Bhuj.



Southern Spain (15 days)

Spain evokes lovely white towns and the scent of oranges, but it is also a treasury of ancient remains including the cities left by the Greeks, Romans and Arabs. As we travel south from Madrid with Prof. Ronald Messier, Middle Tennessee State U., to historic Toledo, Roman Mérida and into Andalucía, we explore historical monuments, Moorish architecture, Córdoba's great cathedral, the splendor of the Alcazar in Seville and end our tour in Granada with the opulent Alhambra.

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When offered a large tract of land with no record of archaeological sites, the Conservancy conducted a survey to determine if it had cultural resources. It did, so the Conservancy established its newest preserve in California.

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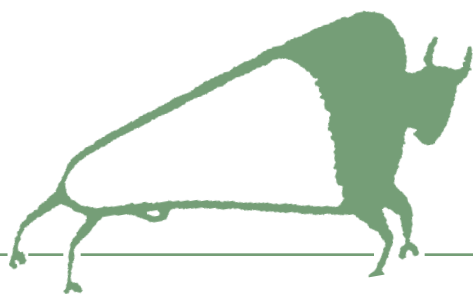
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COVER: According to the Solutrean hypothesis, some 20,000 years ago people from Europe, making their way along sea ice in the Atlantic Ocean, entered the Americas. This is an artist's depiction of that journey.
Credit: Charlotte Hill-Cobb



Lay of the Land

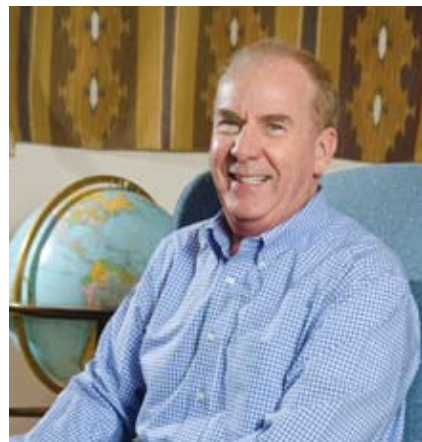
Promoting Unacceptable Behavior

Back in the 1960s Newton Minow, then chairman of the Federal Communications Commission, described commercial television as a “vast wasteland.” Despite the dramatic changes brought about by a profusion of cable and satellite channels, things haven’t gotten any better; in fact they have gotten a lot worse. In this issue of *American Archaeology* (see “Digging Up America,” page 19) we investigate two new cable shows that endorse uncontrolled digging of artifacts, promoting the idea that looting is acceptable behavior.

Ric Savage, of the Spike TV show *American Digger*, brags of digging up as much as a half million dollars’ worth

of historical artifacts each year. Drawing liberally from the sensationalist antics of TV wrestling (Savage was a professional wrestler), the show features such digging techniques as backhoes, jackhammers, and explosives.

Even worse, the National Geographic Channel’s show, *Diggers*, features contrived betting on who can dig up the most loot. No mention is made of scientific information or preserving the context of the discoveries. In one of the pilots, the show’s stars apparently illegally dug up artifacts on Montana state land without the required permit. This is particularly shocking considering the National Geographic Channel is a commercial venture of the venerable



LIZ LOPEZ

Mark Michel, President

National Geographic Society.

Needless to say, archaeologists and preservationists are incensed and united in their sense of outrage. It appears the only recourse at this time is public opinion, and we all need to speak out in favor of protecting our cultural heritage. Controlling looting in America is difficult enough without mindless TV shows endorsing the idea.

Mark Michel

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Scholars: Kimberly Spurr & Jason Nez

PUEBLO PEOPLES OF THE RIO GRANDE
Scholars: Dr. Joseph Suina, Dr. Robert Preucel, & Woody Aguilar

THE CULTURES & ARTS OF MOROCCO & MOORISH SPAIN
Scholar: Dr. Ron Messier

ARCHAEOLOGY & PUEBLO CULTURE OF THE SOUTHWEST
Scholars: Dr. William Lipe & Chris Toya

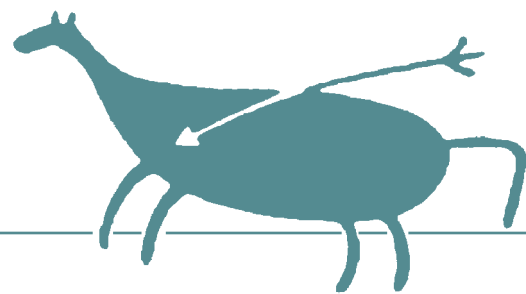
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Don't Forget Fort St. George

I enjoyed the article "Colonizing Canada" (Spring 2012) describing the project at Cupids Cove on Newfoundland. But I am surprised by the statement attributed to archaeologist Bill Gilbert that "the only earlier fortification [than Cupids] is Jamestown in Virginia" which overlooks Fort St. George on the Kennebec River in Maine ("Discovering An Archaeological Time Capsule," Winter 2000-2001).

Fort St. George was built by the Popham Colonists in 1607. The Popham Colony was the sister colony of Jamestown, the other half of the two-pronged attempt by England to secure all of the North American coast between Spanish Florida and French Canada. The Popham Colony failed after only a year, but not before they had constructed a substantial fortification three years before the Newfoundlanders. Of course, both the French and Spanish, who were on the scene much earlier, also built fortifications.

*Jeffrey Phipps Brain
Archaeologist,
Peabody Essex Museum
Salem, Massachusetts*



Katsina, Not Kachina

Please note that the spelling "kachina," which was used in "The Power Of The Kachina Tradition" (Spring 2012), is outdated and disrespectful of contemporary Southwestern Pueblo people who make and utilize the figures, and who have asked that the proper spelling be used (i.e., katsina). Nor are they "dolls." To say they are dolls is in league with saying a crucifix is a doll. It is a blasphemy.

*Claire R. Farrer, Ph.D.
Emerita Professor
of Anthropology
California State University,
Chico*

Sending Letters to American Archaeology

American Archaeology welcomes your letters.

Write to us at 5301 Central Avenue NE, Suite 902, Albuquerque, NM 87108-1517, or send us e-mail at tacmag@nm.net.

We reserve the right to edit and publish letters in the magazine's Letters department as space permits. Please include your name, address, and telephone number with all correspondence, including e-mail messages.

Editor's Corner

For years Dennis Stanford and Bruce Bradley have argued that, some 20,000 years ago, long before the Clovis period, some brave souls set out from Europe's Iberian Peninsula, crossed the Atlantic Ocean, and landed in the New World (see "Iberia, Not Siberia?" Page 38). Recently, there have been a number of important discoveries and provocative claims in first American studies, and this is certainly one of the more provocative and potentially important ones.

Not long ago there were first American scholars who complained about a "Clovis police" that patrolled the halls of academe, rigidly enforcing the Clovis First doctrine and suppressing crazy notions to the contrary. But times, and hypotheses, are changing. It appears there are fewer and fewer Clovis police working that beat, and perhaps that's why these provocative ideas, some of which now seem entirely plausible, are circulating at conferences and being published in journals and books.

As Mike Waters said recently, "It's an exciting time to be in first American studies." Waters is the director of the Center For First American Studies at Texas A&M University and the principal investigator at the Friedkin site in central Texas, where he's uncovered thousands of pre-Clovis artifacts.

Friedkin is one of the more convincing of the numerous pre-Clovis sites that have been reported. Another of those sites, Paisley Caves in Oregon, has yielded pre-Clovis human DNA as well as artifacts.

Stanford and Bradley appear to have a good many skeptics, but they are unfazed by their opposition. And their skeptics are opposing, not suppressing, their argument. Goodbye Clovis police, and good riddance.

Michael Bawaya

WELCOME TO THE ARCHAEOLOGICAL CONSERVANCY!

The Archaeological Conservancy is the only national nonprofit organization that identifies, acquires, and preserves the most significant archaeological sites in the United States. Since its beginning in 1980, the Conservancy has preserved more than 435 sites across the nation, ranging in age from the earliest habitation sites in North America to a 19th-century frontier army post. We are building a national system of archaeological preserves to ensure the survival of our irreplaceable cultural heritage.

Why Save Archaeological Sites?

The ancient people of North America left virtually no written records of their cultures. Clues that might someday solve the mysteries of prehistoric America are still missing, and when a ruin is destroyed by looters, or leveled for a shopping center, precious information is lost. By permanently preserving endangered ruins, we make sure they will be here for future generations to study and enjoy.

How We Raise Funds:

Funds for the Conservancy come from membership dues, individual contributions, corporations, and foundations. Gifts and bequests of money, land, and securities are fully tax deductible under section 501(c)(3) of the Internal Revenue Code. Planned giving provides donors with substantial tax deductions and a variety of beneficiary possibilities. For more information, call Mark Michel at (505) 266-1540.

The Role of the Magazine:

American Archaeology is the only popular magazine devoted to presenting the rich diversity of archaeology in the Americas. The purpose of the magazine is to help readers appreciate and understand the archaeological wonders available to them, and to raise their awareness of the destruction of our cultural heritage. By sharing new discoveries, research, and activities in an enjoyable and informative way, we hope we can make learning about ancient America as exciting as it is essential.

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Events

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❖ NEW EXHIBITS

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FRANK OOMIS

History Colorado Center

Denver, Colo.—This new state history museum creates a rich experience through exhibits and programs that blend technology, media, environments, and artifacts. Exhibits such as “The Great Map of Colorado and Time Machine,” “The People, the Place, and the Promise,” “Destination Colorado,” and “Colorado Stories,” celebrate the spirit of the people over the past 10,000 years and the enduring communities they built. (303) 447-8679, www.historycolorado.org (New state history museum)

The Autry National Center

Los Angeles, Calif.—Featuring remarkable katsina dolls from the Autry’s Southwest Museum of the American Indian Collection, the new exhibit “Katsina in Hopi Life” provides a glimpse into Hopi life and culture. Katsinam (the plural form of Katsina) are spiritual beings who represent all aspects of life and travel to be with the Hopi people six months of the year. Told from the Hopi perspective, this exhibit shares the unique relationship the Hopi people have with the Katsinam, focusing on the values, lessons, and encouraging messages learned from them. Drawn from over 700 katsina dolls in the Southwest Museum, which is considered one of the nation’s finest collections of its kind, the exhibit shows the meaning and purpose of these spiritual messengers. (323) 667-2000, <http://theautry.org> (Opens June 29)

american archaeology



Peabody Museum of Archaeology and Ethnology

Harvard University, Cambridge, Mass.—America’s only known Alutiiq warrior kayak is the centerpiece of a new conservation effort titled “Conservators at Work: Alaska’s Historic Kayaks Renewed.” Museum curators and conservators will be collaborating with Alaska’s Alutiiq Museum and Alfred Naumoff, the last traditionally trained Kodiak Alutiiq kayak maker, in the study and conservation of the collection over the next two years, allowing visitors to see conservators at work in a specially prepared gallery space. Based on Alutiiq oral history, the kayak’s bifurcated bow identified it as Alutiiq, and human hair detailing and possible bear-skin construction indicate it was made for a warrior. The kayaks and related objects, some over 140 years old, evoke an era of complex ocean-going travel, trade, and warfare among Alaska native cultures. (617) 496-1027, www.peabody.harvard.edu (Special exhibit)

Kwanlin Dün Cultural Centre

Whitehorse, Yukon, Canada—In the late 1990s, hot summers melted large patches of ice and snow on the mountaintops of southwest Yukon, exposing large concentrations of ancient caribou dung and rare weapons once used by ancient hunters. Over the past 16 years, more than 220 hunting-related artifacts have been discovered, each adding to the story of early Yukon people and their relationship to the land. The preserved remains of birds, small mammals, and plants that have been frozen for thousands of years have also been found. On public display for the first time, these Yukon ice patch discoveries in the Kwanlin Dün traditional territory are featured in the new exhibit “Secrets of the Ice,” that tells the extraordinary story of these ancient archaeological objects and their important connection to Yukon First Nation People. (867) 633-7807, www.kwanlindunculturalcentre.com (June 21-December 31)



Tempe History Museum

Tempe, Ariz.—The new exhibit “Lessons from the Hohokam: Our Future with Water” focuses on the rise and fall of the Salt River Valley’s ancient Hohokam farmers. The pre-Columbian Hohokam people used water to create a society that thrived for hundreds of years, but ultimately collapsed. Will our modern society continue to thrive, or will we meet the same fate as the Hohokam? Created through a partnership between the Tempe History Museum and Arizona State University’s School of Human Evolution and Social Change. (480) 350-5115, www.tempe.gov/museum (Through September 2)

TEMPE HISTORY MUSEUM



Hudson Museum

University of Maine, Orono, Maine—Among the holdings of the new Hudson Museum are more than 500 examples of the material culture of Maine's Maliseet, Micmac, Passamaquoddy, and Penobscot peoples. These objects, together with collections on loan from other museums in New England, are presented in the new exhibit "Maine Indian Gallery." The assemblage includes brown ash splint and sweet grass basketry dating from 1850 to the present, along with an important collection of basket-making tools and molds, birchbark containers and implements, crooked knives, snowshoes, beadwork, and three full-size canoes. Film footage of 14 contemporary native Maine artists who are masters of their traditions documents how raw materials are gathered, processed and prepared, and how each of the art forms is made. (207) 581-1901, www.umaine.edu/hudsonmuseum (New museum)

❖ CONFERENCES, LECTURES & FESTIVALS

Mid-South Archaeological Conference

June 1-3, Tunica Museum, Tunica, Miss. Presentations, symposia, poster sessions, workshops, and field trips will highlight current archaeological research within the mid-South and Lower Mississippi River Valley. www.msac.weaverassociatesllc.com

International Glacial Archaeology Conference

June 3-8, Kwanlin Dün Cultural Centre, Whitehorse, Yukon, Canada. The 2012 symposium "Frozen Pasts" will highlight the discoveries of North American glacial archaeologists and showcase the opening of a major new Yukon First Nations Cultural Centre. The artifacts and faunal material that emerge from glacial contexts are typically extremely well preserved and of high scientific value. The conference brings together researchers, land and resource managers, and local communities who all share an interest in the phenomenon of glacial archaeology in a single forum for the exchange of information, ideas, methods, and innovations. The symposium will feature three full days of glacial research presentations from around the globe and excursions to Yukon sites. Contact Greg Hare at (867) 667-3771/greg.hare@gov.yk.ca, or www.kwanlindunculturalcentre.com/frozenpasts

Red Earth Native American Cultural Festival

June 8-10, Cox Convention Center, Oklahoma City, Okla. This annual festival draws more than 1,200 American Indian artists and dancers from throughout North America to celebrate the richness and diversity of their heritage. The juried art show and market will feature contemporary and traditional examples of beadwork, basketry, jewelry, pottery, sculpture, paintings, graphics, and cultural attire. Representatives of more than 100 tribes, in full regalia, will march in the Red Earth Parade. The dance competition and demonstrations at Red Earth are one of the rare occasions when dancers from America's Northern and Southern tribes can be seen together in one venue. (405) 427-5228, info@redearth.org, www.redearth.org/red-earth-festival

Arizona Historic Preservation Conference

June 13-15, Hassayampa Inn, Prescott, Ariz. "100 Years of Living History" is the theme of this year's conference, which brings together preservationists from around the state to exchange ideas and success stories, to share perspectives and solutions, and to foster cooperation between the diverse Arizona preservation communities. Workshops, archaeological sessions, and tours of local historic sites are scheduled throughout the conference. A reception and the Preservation Awards will be held Thursday evening. (602) 568-6277, questions@azpreservation.com, www.azpreservation.com

Annual Old Spanish Trail Association Conference

June 14-17, Sevier Conference Center, Richfield, Utah. This year's theme is "The Old Spanish Trail in Utah," focusing on the nearby Fish Lake Cut-off located along the main branch of the Old Spanish Trail where visible remnants of the trail still exist. Enjoy two full days of presentations, a catered dinner, living history entertainment, and field trips to Old Spanish Trail interpretive sites. Contact Doug Ogden at (435) 979-6423, or www.oldspanishtrail.org



Plains Indian Museum Powwow

June 16-17, Buffalo Bill Historical Center, Cody, Wyo. The annual Powwow features dancers, drum groups, and artists from across the Northern Plains who come to celebrate the vibrant cultural traditions and histories of the people of the Plains. Over 40 native artists will display their works. Contact Nancy McClure at (307) 578-4102, nancym@bbhc.org, or www.bbhc.org

Pecos Conference

August 9-12, Pecos National Historical Park, Pecos, N.M. In keeping with tradition, two days of paper and poster presentations will be held under outdoor tents, with professional and avocational archaeologists, historians, and Native Americans, reporting on research from all over the greater Southwest. Enjoy a tasty barbecue dinner, dancing, and music Saturday evening and field trips to local sites on Sunday. Contact Christine Beekman at (505) 757-7210, christine.beekman@nps.gov, or www.swanet.org/2012_pecos_conference

Santa Fe Indian Market

August 18-19, Santa Fe, N.M. This 90-year-old Native American market, the largest and most prestigious native arts market in the world and the largest cultural event in the Southwest, features the juried work of more than 1,100 artists representing 100 tribes. The market is a rare opportunity to purchase artwork directly from professional native artists and to learn about native arts and culture on the historic plaza of beautiful downtown Santa Fe. (505) 983-5220, info@swaia.org, or <http://swaia.org>

Earliest Evidence of Humans in Ohio

IN THE
News



Human butcher marks found on 13,500-year-old ground sloth bone.



CLEVELAND MUSEUM OF NATURAL HISTORY

Microscopic analyses of this femur (thigh bone) of an Ice Age Jefferson's ground sloth revealed that incisions in the bone were made by humans using stone tools.

The femur of a now-extinct, 2,855-pound Jefferson's ground sloth with dozens of cut marks discovered by local residents in an Ohio swamp in the late 1800s has recently been rediscovered on a shelf at a local museum, with analysis indicating this may be the earliest evidence for humans in Ohio. Haskel Greenfield, a specialist in early human tools and hunting at the University of Manitoba, and Brian Redmond, curator of archaeology at the Cleveland Museum of Natural History, conducted microscopic and radiocarbon analyses of the gigantic leg bone and nine other associated bones, concluding that the 41 incisions were the result of humans using stone tools. The femur was radiocarbon dated to about 13,500 years ago. Greenfield and Redmond, with National Park System scientist Gregory McDonald and Firelands Historical Society researcher Matthew Burr, published the results of their analyses in *World Archaeology*.

"This discovery provides the first direct evidence for early human (Paleo-Indian) exploitation of Jefferson's Ground sloth," Redmond said. "We can now add this species to a growing list of now-extinct animals that were preyed upon by Paleo-Indians. In addition, our radiocarbon date places these remains several centuries earlier than any other

Paleo-Indian site in Ohio and pushes back the timing of early human entry into this region."

The collection was donated to the Firelands Historical Society Museum in Norwalk, Ohio, where it was rediscovered in 1998 and recently re-examined by Redmond, who then asked Greenfield's help in determining if the incisions on the femur were made by humans. After examining the bones, a previously skeptical Greenfield concluded that the incisions were man-made using stone flakes or blades. His conclusion was based on the location of the marks, their shape, size, and the direction from which they were made.

"Dr. Greenfield has identified the signatures of both stone and metal tool cut marks on bone from sites in Europe and elsewhere, so he can readily identify the distinctive morphological indicators of stone versus metal marks," said Redmond. "All the marks we see were made by stone tools."

This large, plant-eating ground sloth is one of only three specimens of *Megalonyx jeffersoni* known from Ohio, all of which became extinct at the end of the Ice Age around 10,000 years ago. Measurements of the bones reveal this sloth to be the second largest individual of this species on record. —*Tamara Stewart*



Human Remains and Artifacts Found at Construction Sites

Native Americans hope to slow solar energy projects.



GEORGE KLINE, BLM

Researchers use a grader to search for cultural resources at the Genesis site in the Mojave Desert in Southern California.

After the discovery of charred human remains and other Native American artifacts at the construction sites of two energy projects in the Mojave Desert, portions of one project have been stopped and the Colorado River Indian Tribes have demanded that the federal government slow down construction to protect their cultural resources. Both sites are on land managed by the U.S. Bureau of Land Management (BLM) in Riverside County, California.

The BLM will determine if avoiding the areas where cultural resources have been unearthed is feasible. A tooth and charred bones from a Native American cremation were discovered earlier this year near a construction site for a new Southern California Edison transmission line. The artifacts were uncovered by the wind. When local tribes reburied the remains about a hundred yards from where they were discovered, they found more human remains at the new grave site. The Native Americans believe the finds are evidence of a sacred cremation site of their ancestors. The Riverside County coroner and archaeologists were confident that the remains were Native American and it appears that they are from more than one cremation.

At the Genesis Solar plant, another construction project seven miles away near Ford Dry Lake, no human remains have been found, but a number of lithic artifacts dating from about 8000 B.C. to A.D. 1000 were unearthed last November. After the discoveries, the BLM stopped work on 400 acres of

the 2,000-acre project until further analysis of the sites. That area has since been reduced to about 160 acres.

Before the Genesis project began, a survey revealed cultural resources near the Ford Dry Lake area. Steven Stengel, a spokesperson for NextEra Energy Resources, a clean energy development company, said that they reduced the footprint of the project to get farther away from the edge of the lake because of the potential for uncovering cultural resources. Stengel said it was clear that there were cultural resources throughout the area and it was likely that they could uncover them. "That was known and understood throughout the permitting process," he said. Tribal representatives and archaeologists monitor the construction sites daily.

The \$1 billion project is one of numerous renewable energy projects identified as a priority by the BLM. Erin Curtis, a spokesperson for the BLM in California, said that the agency's approval process is the same for all projects, but priority projects receive more immediate attention and additional resources to speed up the process.

Invoking the Native American Graves Protection and Repatriation Act, the Colorado River Indian Tribes have written to President Obama asking him to slow down Genesis and other solar projects in the Mojave Desert because of the threat to Native American cultural resources. They are also concerned about the impact on view sheds of ancient footpaths. The Obama Administration has not yet responded.

—Paula Neely

Slave Dwellings Discovered at Jefferson's Monticello

The finds could offer a glimpse of how slaves' lives changed over time.

Archaeologists at Monticello, home of Thomas Jefferson, the third president of the United States and author of the Declaration of Independence, recently discovered two slave dwellings about a mile and a half east of the estate's mansion. One of the sites dates to the early 1800s when Jefferson resided there.

The sites were discovered this spring during an archaeological survey at Tufton farm, one of the plantation's four farms. Tufton was owned by Jefferson's father, Peter, from the mid 1700s until Jefferson assumed management in the 1760s. Colonel Thomas Macon purchased the farm in 1833, after Jefferson died and his slaves were sold to pay his debts. Jefferson owned about 600 slaves in his lifetime and 200 slaves at any point in time.

The early-1800s site was probably occupied by enslaved field hands, according to Fraser Neiman, director of archaeology at Monticello, which is located near Charlottesville, Virginia. Archaeologists have unearthed a glass bead, a slate pencil, a metal coat button and numerous broken pieces of refined English earthenwares and some Chinese porcelain. They also recovered a padlock that matches one unearthed on Mulberry Row, where slaves lived and worked next to the mansion

Artifacts that date to the mid 1800s, including ceramics, glass tableware, and nails, were also unearthed at the site. Neiman said this indicates that it was later occupied by slaves who belonged to Macon, who owned 46 slaves and became one of the wealthiest farmers in Albemarle County. Macon



Researchers Devin Floyd (foreground) and Tyler Thompson excavate and screen for small artifacts.

also built a Greek-revival style mansion that still stands on the property. Based on the artifact scatter, Neiman said there could have been at least three or four widely spaced single family homes at the site, although evidence of building foundations has not been discovered.

The other site dates to the mid 1800s. The site includes the remains of a stone foundation and a brick chimney from two dwellings and artifacts from that time period.

Neiman said that the Jefferson-era remains on the earlier site will provide an opportunity to assess how the material lives of slaves living on the outlying Tufton farm compared to the lives of field hands who lived and worked closer to the mansion, and domestics and artisans living on Mulberry Row. The later site could offer insight into how the material lives of slaves changed from Jefferson's time until the Civil War and after emancipation. —Paula Neely



The padlock is identical to one found on Mulberry Row.



Lawsuit Stops Repatriation of Ancient Remains

Scholars' lawsuit claims studies haven't proven 9,000-year-old human remains are affiliated with tribes.

Three University of California professors have filed a lawsuit to stop the transfer of two sets of 9,000-year-old remains from the University of California San Diego to the Kumeyaay Cultural Repatriation Committee (KCRC), which represents 12 tribes in San Diego County. Invoking the Native American Graves Protection and Repatriation Act (NAGPRA), the KCRC has been trying to gain custody of the remains and UC San Diego was planning to release them. UC San Diego has custody because they were discovered on the university's property in 1976. The KCRC has also filed a separate but related lawsuit demanding the remains be transferred to them.

According to NAGPRA, institutions that receive federal funds must return native remains to culturally affiliated native groups. But in 2008, a group of experts assigned to determine the skeletons' affiliation found them to be "culturally unidentifiable" and that the 9,000-years-old remains pre-date the existence of the 12 tribes in the San Diego region. However, in 2010, the federal government issued a regulation regarding culturally unidentifiable remains, mandating that they be repatriated to the tribe whose aboriginal lands they were removed from. The KCRC filed their complaint on April 13 in U.S. District Court, stating that the University of California should be compelled to repatriate the remains to the Kumeyaay tribes, because the tribes claim the remains were found on land that was once occupied by them.

But in the Kennewick Man case (*Bonnichsen v. U.S.*) in 2004, the U.S. Ninth Circuit Court of Appeals held that human remains must bear some relationship to a presently existing tribe, people, or culture to be considered Native American within the meaning of NAGPRA. The plaintiffs, anthropologist Margaret Schoeninger of UCSD, archaeologist Robert Bettinger of UC Davis, and paleontologist Timothy White of UC Berkeley, argue in their lawsuit that that neither the age of the skeletons nor their geographic location provide an adequate basis for establishing cultural affiliation between the remains and the Kumeyaay people, and therefore NAGPRA doesn't apply.

At the request of the plaintiffs, Judge Richard Seeborg of the U.S. District Court for the Northern District of California issued an injunction on May 7th to place a temporary restraining order against the remains' transfer to the tribes



JANAUSTIN, SANTA MONICA COMMUNITY COLLEGE

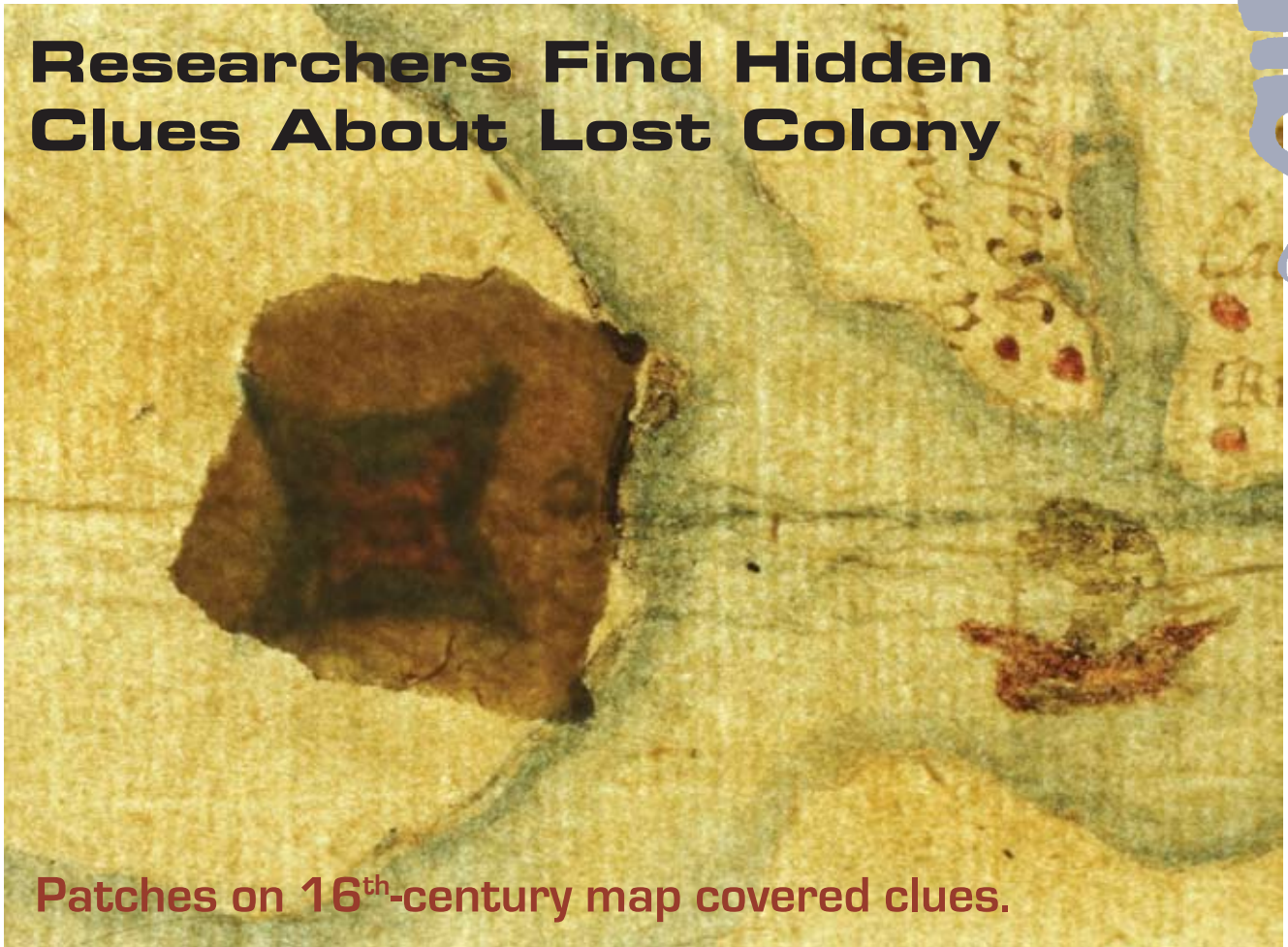
The 9,000-year-old remains of a male and female were found in 1976.

until the plaintiffs' claims could be reviewed. The researchers argue that analysis of the remains could reveal information about some of the earliest humans to settle the New World. They also note that new methods are being developed to extract and study ancient DNA and to analyze the lifestyles of ancient people. The university has not allowed DNA testing of the remains in compliance with the tribe's wishes.

—Tamara Stewart



Researchers Find Hidden Clues About Lost Colony



(P&D 1906.0509.1.3 (DETAIL), © TRUSTEES OF THE BRITISH MUSEUM

Patches on 16th-century map covered clues.

A transmitted light image of the symbol underlying the northern patch on "La Virginea Pars" by John White, produced by lighting it from below.

A hidden fort symbol and other clues that were recently discovered on a 1585-87 John White map, known as "La Virginea Pars," could help archaeologists pinpoint where a group of colonists settled after they vanished from the settlement known as the Lost Colony on Roanoke Island, Virginia.

Over 100 English colonists landed on the island in 1587. White, who was the governor of the colony, went back to England for supplies, but he was unable to return to the colony until 1590. By then, all of the settlers had mysteriously disappeared.

"It's a stunning discovery. It's the first major new evidence of what happened to the lost colonists in over 400 years," said historian James Horn of the Colonial Williamsburg Foundation. Owned by the British Museum, the map depicts the coastal area from what is now Cape Henry, Virginia, to Cape Lookout, North Carolina. Two paper patches were layered over areas—one over the northern end of the Albemarle Sound and the other over the north coast of the Pamlico River—that the mapmakers wanted to correct or redraw.

Amazingly, no one had looked under the patches until recently when Brent Lane, a researcher with the First Colony Foundation, asked the museum what was there. Lane was studying the map to help identify the location of Secotan, an

Algonquian Indian Village depicted in a White illustration.

Using nondestructive techniques, museum researchers discovered the symbol of a fort, a four-pointed star, at the confluence of the Chowan and Roanoke rivers underneath the Albemarle Sound patch. This could be where Sir Walter Raleigh, who sponsored the colony, planned to establish the "Cittie of Raleigh." It could also be where the colonists relocated.

Horn said there are several pieces of evidence that add further credibility to this theory. According to an account at the time of his departure from the island in the summer of 1587 to return to England for supplies and reinforcements, White wrote, "at my comming away they were prepared to remove from Roanoak 50 miles into the maine." That's about the distance from Roanoke Island to the location of the fort marked on the map.

Archaeologists have also discovered late 16th-century ceramics at an Upper Albemarle Sound site, some of which match ceramics that were discovered at Roanoke Island and Jamestown, according to Nicholas Lucchetti, a foundation member and principal investigator at the James River Institute for Archaeology.

The other patch on the map over the Pamlico River appears to have been used to correct information about the shoreline and the location of Indian villages. —Paula Neely

A Colossal Conservation Project

THE MERGER BETWEEN THE AUTRY AND THE SOUTHWEST MUSEUMS HAS RESULTED IN WHAT COULD BE THE COUNTRY'S BIGGEST CONSERVATION AND REHOUSING EFFORT.

BY PAT H. BROESKE

IN A CITY RENOWNED FOR REINVENTION, where non-indigenous palm trees dot the landscape and cosmetic surgeons are as ubiquitous as freeways, the priceless collection of a landmark museum is getting a makeover. Packed away for decades, the artifacts at the Southwest Museum of the American Indian—Los Angeles' oldest museum—are seeing the light (as much as is museum-safe), in an ambitious conservation and rehousing project.

The massive undertaking is being overseen by the Autry National Center of the American West, a nationally-respected intercultural history museum located within Los Angeles' sprawling Griffith Park. In 2003 the Autry, which started as a Western history-themed museum, merged with the then-struggling American Indian-oriented Southwest Museum. Seven years later it was announced that the Southwest's extraordinary Native American collection, including tens of thousands of archaeological items, was going to be moved to



CORY WILKINS

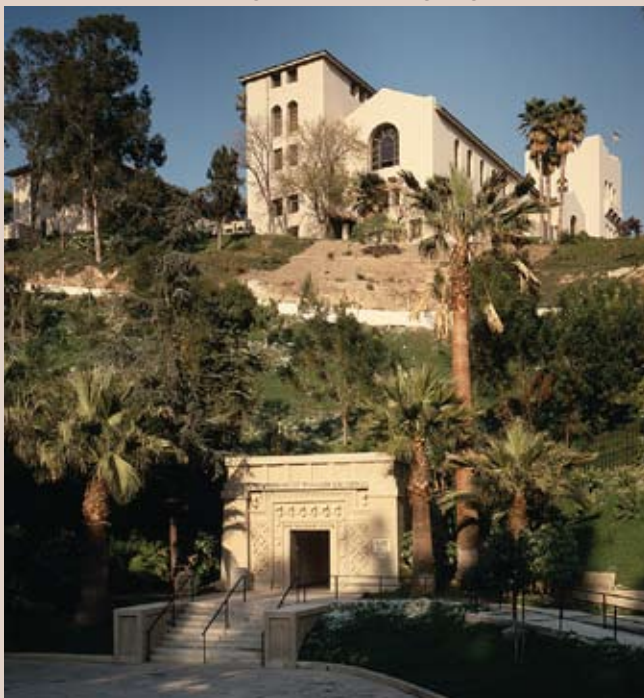
The Autry National Center of the American West

the Autry Resource Center (ARC), an off-site storage locale, and that portions of it would later be exhibited in the Autry galleries. That triggered a local political and cultural shootout that continues to ricochet. (see "Resistance to the Merger," page 16.)

It also resulted in the current conservation project, which began in September 2010 and is expected to end in early 2013. "We think this is the largest conservation effort in the nation right now," said Joan Cumming, Autry's senior director for marketing and communications. The Southwest Museum has the country's second largest collection of Native American objects, and while it focuses on the American Southwest, some of the items come from the northern- and southern-most regions of the Americas.

The entire collection, which also includes ethnographic and paleontological items, numbers approximately 250,000, and the archaeological holdings are more extensive than was originally thought. "Our projected number was 138,000 archaeological items," said LaLeña Lewark, director of collections and conservation for the Autry. "But we're already getting close to that, and we have almost a year to go. We're going to surpass it, we just don't know to what extent."

To date, staff archaeologist Karimah Kennedy Richardson



The Southwest Museum of the American Indian

LARRY REYNOLDS/BRUNNEN RESEARCH LIBRARY COLLECTION, AUTRY NATIONAL CENTER, CT 20



These objects, which were moved from the Southwest Museum's Caracol tower, are now housed in one of the museum's former exhibit halls. The items on the top two shelves have been repackaged in archival boxes.

american archaeology



The 115-foot Caracol tower has no elevators and only enough space to walk in a single file line. In order to remove the boxes from the damaged tower, the staff, carrying one box at a time, had to ascend and descend the 160-step spiral case shown here.

and other team members have conserved, reinventoried, and rehoused some 120,000 items, most of which had been in 2,200 shoebox-size cartons. Another 600 cartons have yet to be examined. “It’s hard to gauge what’s going to be inside,” said Richardson. “One box might hold 200 points. Another might contain one really large item.”

The Southwest sponsored excavations from the 1920s to the ‘60s, according to Richardson, and as archaeologists and other staff came and went, certain objects were documented and exhibited while others were placed on shelves and largely forgotten. “It’s not that pieces were lost. They’re all here,” she said. “They just hadn’t been organized in a systematic way.” Moreover, many of the items are so small that it’s easy to understand how they were overlooked in the shuffle of people and time.

To address this problem, Richardson is organizing them according to the sites they were recovered from. “Boxes A through D might now contain materials from one particular site,” whereas before those same materials were sometimes scattered in 20 different boxes that also contained items from other sites. So, once the project is completed, if someone is researching the Pueblo Grande de Nevada (also known as the “Lost City” in Overton, Nevada, which was submerged beneath the waters of Lake Mead following the construction of Hoover Dam), they will have a database that lists all such artifacts and related materials in the collection.

The conservation effort has resulted in some remarkable, but forgotten, items being rediscovered. A box from a Florida site excavated by noted archaeologist Clarence Moore around 1918 and long since paved over, contained a stunning conch shell that would have been attached to a stick and used as a digging implement. Another carton, from former Southwest curator-archaeologist Mark Raymond Harrington’s 1950s’ excavation at Tule Springs in Southern Nevada, turned up jaws of extinct camels, sloth bones, and a mammoth’s tooth. “I was expecting to find the paleo artifacts involving man,” admitted Richardson, “not the kind of things you see at a natural history museum.” Nor did she imagine

she would see the Southwest Museum expedition flag—the fragile piece had been carefully folded—that Harrington and his crew carried with them.

She also found a nearly eight-inch, bowl-shaped vessel with a human face and red, black, and cream geometric decorations that came from Casas Grandes in northwestern Mexico, as well as ceramic sherds embellished with glyphs that were recovered at Teotihuacán near Mexico City. A small brownware jar that had been mislabeled as Spanish-Colonial was, in fact, Middle-Eastern, and dated to about 3000 BC. “It was probably used to hold oil,” said Richardson, who tracked down a 1960s-era magazine article about the piece, which came to the museum by way of a collector.

And then there was the rediscovery of materials from excavations by Charles Fletcher Lummis, without whom

DAVID BENITEZ



During the rehousing process, intact vessels, such as this one from Casas Grandes, were rediscovered.

the Southwest Museum would not exist. Lummis was a photographer, writer, editor, librarian, collector, historian, and archaeologist. Born in Massachusetts, he coined the term, “Southwest,” and came up with the iconic slogan, “See America First.” Lummis knew all about that, having famously walked from Cincinnati to Los Angeles in 1884-1885. Along the way, he wrote articles and developed what would be a lifelong passion for Native American and Spanish cultures.

Lummis went on to establish the Southwest Society in 1903. The Society was the Western branch of the Archaeological Institute of America, and the precursor to the Southwest Museum, which he founded in 1907. Originally a general interest museum, it wasn’t until the 1926 arrival of director James A. B. Scherer—previously a college administrator at what became Caltech—that the museum shifted its focus to Native American cultures and anthropology. That was a fitting legacy for Lummis, who passed away in 1928.

THE REDISCOVERY OF LUMMIS’ MATERIALS and other items might not have happened but for a seismic shake-up. Centered in Los Angeles’ San Fernando Valley, the Northridge earthquake of January 17, 1994, left some 60 people dead, and another 8,700 injured. (The quake’s epicenter was actually in Reseda, but early accounts—and resulting media headlines—put it in neighboring Northridge.) Damages for all of Los Angeles were estimated at \$20 billion. At the Southwest, the signature tower, called the Caracol—Spanish for snail, or spiraling seashell—suffered serious cracking which, combined with a deteriorating roof, led to water seepage and insect infestations. This posed a major problem, as the collections, of which only perhaps five percent (a number not atypical

for medium to larger-size museums) had been shown, were stored in the tower and consequently endangered.

Built in 1914, the Mission Revival-style museum is situated on a 12-acre site in the Mount Washington-Highland Park communities, northeast of downtown L.A. Its white tower rises above the scenic Arroyo Seco, a rugged canyon serving as a regional watershed and recreational area, and as a gateway to Pasadena. The seven-story, 115-foot tower has no elevator, so staffers, in order to remove the cartons of collections, had to ascend and descend a 160-step spiral staircase. Several objects had to be rigged and brought in through exterior windows, because they were too large to be carried down the stairs. Gradually, the cartons took over what was once exhibit space. In 2009 the building was closed to the public, while its Braun Research Library remained open.

The staff then began work on conserving and rehousing the collections, an effort presently requiring the work of 15, including Richardson. The ethnographic collection was attended to first for various reasons, one being it had a greater propensity for insect infestation than the ceramics or the archaeology collections. To contain active infestations and to arrest the growth of mold and mildew, organic objects—made of fur, grasses, feathers, wood, twigs, leather/hides, and roots—were placed inside a large freezer and kept for 10 days to two weeks. (In an earlier era, this process was



Archaeologist Karimah Richardson (left) reviews the rehousing of conch shells that were once used as digging tools.



Archaeological collections assistant Monica Corpuz rehouses and inventories lithic tools.

carried out with toxic chemicals, such as arsenic, mercuric chloride, or even DDT.) The pieces were stabilized, photographed, and packaged in special custom-made acid and fume-free boxes with labels that included the date that the freezing occurred.

For archaeological items, the process begins with an assessment by collections managers, who determine whether the packaged artifacts require new storage bags or a particular kind of housing mount. Where exhibition mounts are often unobtrusive—some seemingly “invisible” so as not to detract from what is being displayed—housing mounts are functional and as conspicuous as need be. They cradle and support the artifact, keeping it safe during storage, transport, and handling. Products used to create the mounts and the rest of the packaging are acid-free, to prevent oxidation.

Some items require cleaning, which is sometimes done with a small specialty vacuum. Conservators carry out any needed repairs. The Autry also works with tribal communities who are interested in viewing their cultural material that is in the collection. “For the archaeology collections our [tribal] concerns usually involve objects that have burial and ceremonial contexts. Our goal is to repatriate what we can,” said Richardson, who noted the museum has a Native American Graves Protection and Repatriation Act (NAGPRA) coordinator who is responsible for consulting with the tribes.

ROBERT MANCE

Resistance to the Merger

Since 2006, when the Autry announced it was going to relocate the Native American collection of Los Angeles’ historic Southwest Museum and renovate its own gallery space to display some of these items, there has been a war of words, and legal action.

Because the Autry is named for co-founder Gene Autry, the famous singing cowboy of TV, movie, and “Rudolph the Red-Nosed Reindeer” fame, the controversy has generated lots of cowboys vs. Indians rhetoric. More than one vocal local has referred to the Autry as “the black hat,” accusing it of merging with a financially-strapped Southwest with the intention of riding off with its prestigious collection, rather than refurbishing and revitalizing the aging but beloved building that was the collection’s home for nearly 100 years.

The Friends of the Southwest Coalition, a diverse group of more than 65 community organizations, has rallied. “If you separate the collection from the building and its original historic context, it no longer is the Southwest Museum,” said Nicole Possert, a founder of the Coalition and a board

member of the Highland Park Heritage Trust. The neighborhood of Highland Park is adjacent to Mount Washington, home to the museum.

The Trust and the Mount Washington Homeowners Alliance have filed a lawsuit against the City of Los Angeles, pertaining to the Autry’s plans to expand their main facility, which is on city property, in order to accommodate some of the Southwest’s collections. The groups contend that the City Council ignored zoning and environmental laws in order to assist the Autry, and that the City’s action harms the Southwest Museum. The Autry, however, said it is simply renovating existing gallery space rather than expanding its facility.

The Autry originally said it would operate both museums separately. But after spending \$2.4 million to repair the Southwest’s building, Autry officials announced it was not economically feasible to bring the structure up to modern museum standards, and that the collection would be better off elsewhere. “For us to be responsible stewards, we have to keep it safe—for future generations, and for research-



A sculpture of Gene Autry, who co-founded the Autry National Center.

ers and tribal members,” said Autry spokesperson Joan Cumming. “[The Southwest building] is not an ideal place to be housing a priceless, one-of-a-kind, second largest-in-the-country collection of Native American artifacts.”

The Autry has recently approached the City of Los Angeles about partnering with the museum to turn the Southwest’s building into a “vibrant historical and cultural facility,” said Luke Swetland, the Autry’s vice president for exhibitions and special projects. In the meantime, the Autry has reopened the Southwest on weekends for small exhibits, lectures, and other gatherings. —Pat H. Broeske

CORY WILKINS

The items are also re-inventoried, but the laborious process of cataloguing them will not occur until after the move to the ARC, which is about two and a half miles from the Autry and 11 miles from the Southwest. Cataloguing is “just too vast a job for us right now,” said Kim Walters, interim director of the Southwest Museum. Typically, the catalog listings include the object name and identification number, photographs of it, the material it is composed of, its dimensions, the name of the archaeologist who recovered it, the date and the site it was recovered from, and any special remarks about the piece. “If we did this to every one of the items we’re now going through, we’d never get done, with this phase,” Walters said.

Over the years, most of the items have been documented to some extent, and many have catalog cards housed in the Braun Research Library. The descriptions of the items, some of which are handwritten, range from extensive to brief. “Some were done in detail by the actual archaeologists,” Richardson explained, “and others were done on a very rudimentary level by museum personnel.”

The archaeologists’ notes are sometimes in corresponding boxes. When they aren’t, Richardson searches the library’s holdings. Resulting information is entered into a MIMSY collection management software program that merges the databases of the Southwest and the Autry. (The Southwest previously utilized ARGUS, which was actually designed and developed at the museum.) Boxes are subsequently bar-coded, which identifies the exact location—hall, shelf, and row—of the box.

RICHARDSON HAS YET TO OPEN CARTONS from excavations in New Mexico and Arizona, but she was impressed by some of the artifacts from sites in California, Nevada, and beyond, such as the large steatite (soapstone) bowl from the indigenous Southern California people called the Tongva (also called the Gabrieleño, or the San Gabriel Band) who lived in the San Fernando Valley. She didn’t know the piece’s **american archaeology**



These dilapidated boxes were removed from the Caracol tower. Many of them are the original boxes that the objects were placed in when they first entered the museum.

specific provenance due to its meager documentation. “But maybe, as the reinventorying continues, I’ll find those [corresponding] materials,” Richardson said.

She was also surprised by the magnitude of sites excavated by Harrington in the Borax Lake region, several hours north of San Francisco. “Look,” said Richardson, “his excavation there has been well documented. But what isn’t well known is how many sites he excavated around the Borax area. I’ve found references to 50 sites.” This information will be valuable to other archaeologists researching that area. In fact, Richardson has so far documented that the Southwest’s collections were recovered from more than 860 sites, and she believes that number could triple by the time this phase of the project is completed. Why? Because a single box’s contents might come from numerous sites. “I’m finding that certain expeditions were really umbrellas—a lot of sites



ROBERT MANCE

In order to identify the two boxed sherds in the middle of the photo, the staff consulted the book below, which was published by the Southwest Museum's former Mesoamerican consultant Hasso Von Winning. According to the book, the sherds were found at Teotihuacán.

were excavated under one expedition.”

For years, the Southwest Museum Collection has been known for such things as its unparalleled array of Navajo textiles, its Hopi and Zuni kachina dolls, and its 14,000 baskets. But as the conservation and rehousing project has shown, it also has remarkable artifacts that have long been unseen.

And more remains to be revealed. Clustered in a subterranean room of the museum are 5,000 to 10,000 stone objects. (When they came into the museum they were too heavy to be carted up and down the staircase.) They will also be reinventoried and rehoused, and, with the rest of the collection, taken to the ARC, which is now being refurbished and is anticipated to open in 2015. The ARC will house the

Southwest collection and the Autry collection, as well as both of their libraries.

“By then, we’ll have a feel for everything,” Richardson said confidently. “And it will all be in the proper archival materials. So we’ll be more equipped to move ahead.

The idea is for researchers to be able to see, on the [eventual] online database what we have, so they can come to ARC to do the rest of their work. We know the end goal. We just aren’t there yet.”

PAT H. BROESKE is a Southern California native and former Los Angeles Times staff writer whose byline has appeared in dozens of publications, including the New York Times and the Washington Post.

DIGGING UP AMERICA



Former wrestler Ric Savage heads the cast of Spike TV's *American Digger*.

THE ARCHAEOLOGICAL COMMUNITY IS ALARMED ABOUT THE POSSIBLE IMPACT OF TWO NEW REALITY TV SHOWS ON CULTURAL RESOURCES.

By Wayne Curtis

american archaeology

RIC SAVAGE stands six-foot-five-inches tall and weighs 400 pounds. He's bearded and 42-years old and for seven years he was a wrestler in the Balkanized professional wrestling world before retiring from that life in 1997. He then pursued his long-time interest in treasure hunting — "I've been into history since I was nine years old," he said—establishing *American Savage*, an artifact-hunting company based out of Mechanicsville, Virginia.

Last March, Savage took on a new role, at least in eyes of the archaeological community: he became the evil

René Emile Belloq to good-guy Indiana Jones. That's when *American Digger*, a half-hour show starring Savage and his metal-detector-wielding team, premiered on SpikeTV (a unit of MTV). "We dig up America's backyard and split the profits with you!" he bellowed in introducing himself and what he does to viewers. American Savage, according to a press release from SpikeTV, is now "the top artifact recovery company in the country, digging as much as half a million dollars worth of historical artifacts out of U.S. soil each year."

Savage isn't the only one on television wielding a metal detector. A month prior, two episodes of *Diggers*, another "reality" show, aired on the National Geographic Channel. Similarly themed, it featured a pair of personable and entertaining amateur artifact hunters named George "King George" Wyant, and Tim "Ringmaster" Saylor. With beeping metal detectors in hand, they went artifact hunting around an old state prison in Montana and in a couple of locales in South Carolina.

The two shows vary in their tone and approach—*American Digger* borrows more liberally from the over-the-top antics of the wrestling world (backhoes, jackhammers, and explosives are used in excavating), while *Diggers* feels more like you're tagging along with a couple of old college buddies who happen to have metal detectors, trowels, and—possibly offscreen—a case of beer.

But both share several traits, such as manufactured conflict. (From the promotional material for the second episode of *American Digger*: "...abandoned houses, vicious dogs, and buried hazards may destroy their dreams of a Savage profit.") Faux conflict is often staged between Savage and landowners with whom he's negotiating digging rights and the split of profits. In *Diggers*, the conflict arises from a more genial betting competition between the two hosts to see who can turn up better finds. (The loser in the Montana episode had to ride a bike off the end of a dock into a chilly Montana pond.)



George Wyant, attired in a bizarre costume, rides a bike off a dock in an episode of *Diggers*.



Both shows feature a lot of up-tempo music, corny humor, jittery hand-held shots, and rapid jump cuts. And both make digging in the earth seem like a matter of nonstop hilarity and excitement, free of tedium or toil. More vexingly, they also share an evident lack of care or concern about the context of the discoveries—of documenting where and how the artifacts were recovered. The shows aren't about the past so much as about a restless search for booty. And so they share one more thing in common: both have made a lot of archaeologists cranky.

"Unfortunately the shows are not doing anything for helping the public understand the importance of archaeological sites...and why we're interested in protecting them," said Matthew Reeves, director of archaeology for the Montpelier Foundation in Orange, Virginia.

After the shows aired, the archaeological community



Having appraised the items found by Tim Saylor (middle), and George Wyant (right), buyer Mike Coker gives Wyant money in exchange for an 1886 Indian head penny Wyant found on South Carolina's Kiawah Island.

responded swiftly, both in number and volume. “Excavating in the way you suggest, without a plan, with little regard for science, preservation, or future approaches, is unethical and robs our descendants of knowledge,” wrote the Society for American Archaeology president Fred Limp in a letter to the head of the National Geographic Society.

The Archaeological Institute of America’s president Elizabeth Bartman expressed similar concerns in letters to both networks. “The AIA believes that the show promotes looting and the destruction of our shared archaeological heritage,” she wrote.

Other critics zeroed in on specifics. In a joint letter, both Montana’s state archaeologist and historic preservation officer asked that National Geographic cease airing the Montana episode, as it apparently depicted activity in violation of a state statute (the crew did not have a state antiquities permit

before digging on state property, although the site overseer had invited them to dig). National Geographic declined to take it off the air.

Moreover, criticism wasn’t limited to a narrow swath of academic archaeologists and state officials. Kristina Wycoff, a Tennessee-based CRM archaeologist with an engineering and project management firm, launched an online petition at Change.org headlined “Stop SpikeTV from looting our collective past!” objecting that *American Digger* “encourages and glorifies looting and the antiquities trade at the expense of American history.” Within a month, more than 18,000 had signed. Another 4,000 signed a similar online petition aimed at the National Geographic Society posted by another Change.org member.

“It’s clear that not just archaeologists responded with firm commentary on the shows,” said Paul Mullins, president



JEFF DALY/SPIKE TV/PICTUREGROUP

The cast of *American Diggers* use metal detectors to search for buried treasure in St. Augustine, Florida.



George Wyant holds a sterling silver toe ring found on Kiawah Island.

of the Society for Historical Archaeology, “but a lot of smart lay people as well.”

BOTH SHOWS serve up a sort of extreme, dirt-caked version of *Antiques Roadshow*—that is, the suspense is often constructed around the revelation of the value of the recovered items, as determined by a local appraiser or antique dealer, at the end of each episode. “The emphasis is on the cash, not history,” said Kurt Thomas Hunt, a freelance CRM archaeologist in New York, who has been critical of the shows.

Archaeologists generally seem willing to cut the National Geographic Society more slack than Spike. Not only is its show less aggressive in its excavation techniques, but the Society has a long and honorable history. “They’ve supported archaeology for a century and a quarter, and I think they are allowed to have a misstep once in a while,” Mullins said.

“Spike’s show is a completely different beast,” said Limp. “Its activities are really egregious—they use backhoes and explosives, then take the objects they’re finding down to the nearest place to sell them and distribute the cash... It’s extremely destructive and has no redeeming value.”

“A show like *American Digger* seems to imply that cultural heritage is only significant if it is profitable or fashionable,” wrote Bartman to Spike. “Linking artifacts to monetary values will encourage people to engage in digging, legal or illegal, in the hopes that they, too, can strike it rich.”

The responses from National Geographic and Spike have differed. The former noted that it had commissioned

just two episodes as pilots, both of which aired in February. It stressed that many viewers responded favorably to the series—“I have almost 40 years of enjoying this hobby/passion and love to see others doing the same!” wrote one—but after being made aware of the broader concerns, National Geographic reached out to the archaeological community to learn more.

“As a result of those conversations, we are now in the process of organizing a more in-depth set of meetings to explore how we might take more direct advantage of the archaeology community’s insights and expertise with programs of this type,” Chris Albert, senior vice president, communications and talent relations for National Geographic Channel, wrote in an email message to *American Archaeology*. “The dialogue has been both encouraging and constructive.”

At press time, planning was underway for a one-day meeting among representatives from metal detecting groups, archaeologists, and network officials at National Geographic’s headquarters in Washington, D.C. The point of the meeting is to share ideas and discuss ways to allay concerns about future episodes.

By most accounts, Spike has been less conciliatory and more defensive about complaints. The network had acquired 13 episodes of *American Digger*, for which filming has been completed. Spike said it had no plans to re-edit any of the episodes. “Ric Savage and his team are professional diggers who perform their jobs with the utmost respect to local

laws and customs,” the network stated in an email response to *American Archaeology*’s inquiries.

Series host Ric Savage also defended his practices in a phone interview. He said that he doesn’t dig on public lands, and always gets permission from private landowners beforehand. “It’s Mr. and Mrs. Smith’s backyard,” he said. “No archaeologist on planet earth is going to be driving through that neighborhood and knocking on the Smiths’ door and asking, do you mind if we do archaeological exploration in your backyard,” he said. “The places we go are the places no one would ever go if we weren’t out there knocking on doors.” Concerns about losing data on the site are misplaced, he said, as the data would never be obtained anyway.

Savage also dismissed concerns that his show will trigger an avalanche of irresponsible collectors invading public and private lands without permission. “The concept that our show is going to make people run out, buy metal detectors, and go to Gettysburg and start trying to dig [everything] up, I just don’t see that happening,” he said, “I mean, *Antiques Roadshow* came along and I didn’t see anybody knocking off their aunt to get their old Singer sewing machine to try to make a buck.” He noted that the expense of buying a good metal detector serves as a deterrent to many aspiring treasure hunters, as do stiff penalties for digging on public lands.

Savage said that while he’s trying to run a business and make a profit, his passion is history, and he tries to convey that on-air. “If you’ve watched our show, you do see that we put the artifacts in historical context, we discuss who used



NATIONAL GEOGRAPHIC CHANNELS

This is a sample of the items found by Diggers Saylor and Wyant in Georgetown Lake, Montana.



MATTHEW REEVES, MONTPELIER FOUNDATION

Metal detectorists help archaeologists determine the boundaries of slave quarters during a workshop at Montpelier.

them, where they used them, why they used them, and what they used them for,” he said. “I understand archaeology is a lot more detailed than that. I understand about position of the artifacts, and what was found with the artifacts,” he said. “But at the end of day, if you look at what we do, we educate people and we still get the job done.

“It’s like music,” he added. “Archaeologists play classical music, and we play heavy metal. But we’re all playing music.”

DESPITE WIDESPREAD unease in the archaeology community, Mullins doesn’t think the shows merit all the hand wringing they’ve produced, especially in online forums. “To a certain extent it’s like any online communication,” he said. “There’s a tendency to see the extremes rather than the gray middle ground where most of us stand.”

In fact, he sees an upside in the potential to bring newcomers into the fold, and encourage more sensible and accountable digging. “Their enthusiasm is a great place to start,” he said. “I always want to meet people who are excited about what I’m doing, and I want them to participate.”

Reeves agreed. Indeed, the week *American Digger* premiered, Reeves hosted a week-long workshop for 14 amateur metal detectorists on the Montpelier grounds. “Folks who have some experience metal detecting are some of the best volunteers,” he said. “You can’t just pick [a detector] up and learn how to do it right away. But a metal detector can

become another tool in the arsenal an archaeologist can use to find and preserve sites.”

Getting help from an experienced metal detectorist while conducting a site survey was invaluable, he said. But so was being able to educate detectorists about archaeological best practices, and spread the word about the importance of documenting every find. “They can see why archaeology is important, and in the end become advocates,” said Reeves. “Having open discussions with the metal detector participants about the information archaeologists can obtain from careful excavation of sites was the goal of the program—and based on the participants’ response, we succeeded. It leads to a more positive reaction than just telling metal detectorists that what they do is wrong.”

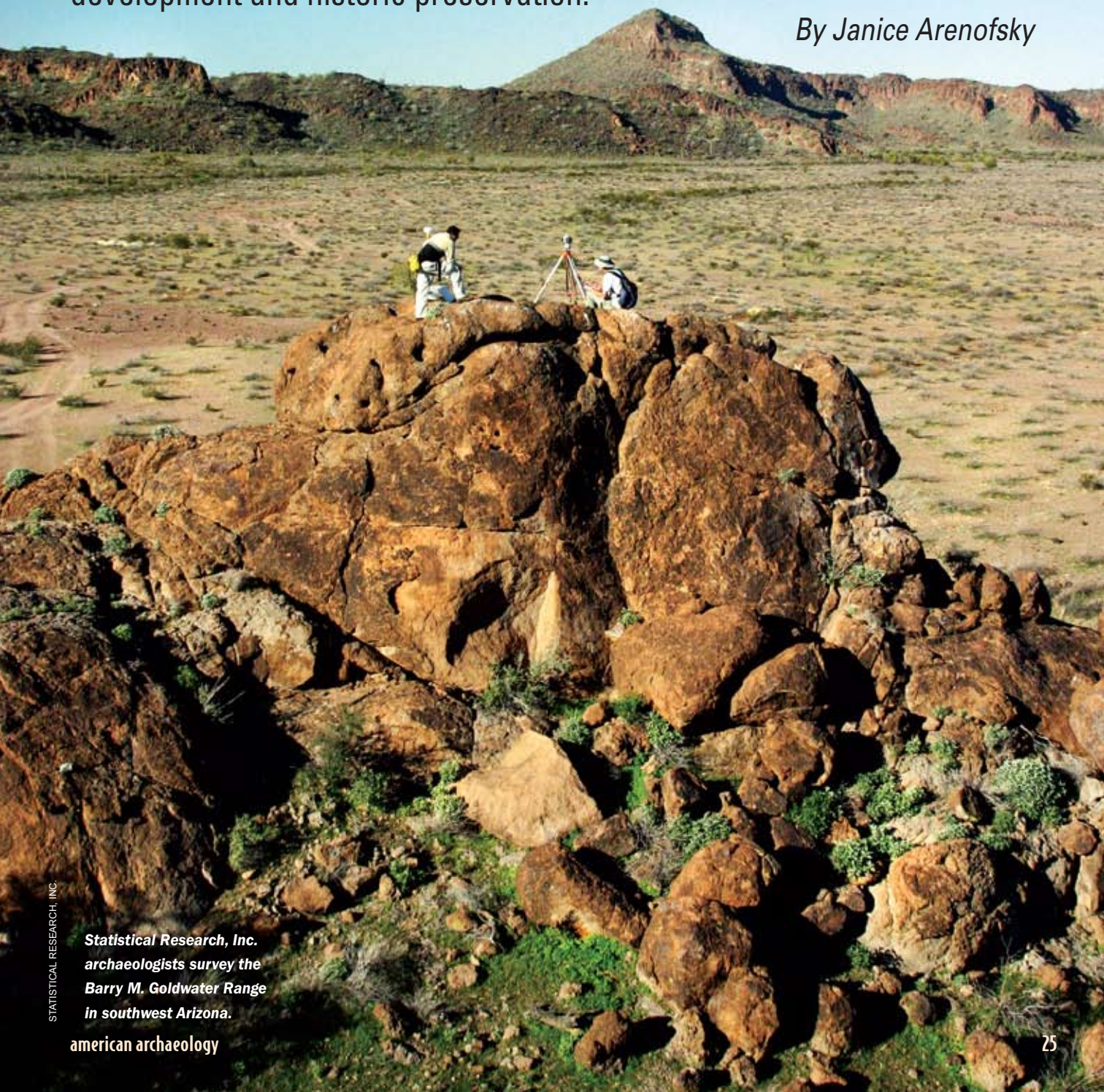
During the workshop, Reeves recalled, one experienced artifact hunter, intent on helping the archaeologists locate sites on the 2,700-acre property, got a strong signal on his detector. He shouted, “I hope this is a wrought nail!” Then the man got a sheepish look, Reeves said, and he admitted, “I never thought that before.” Reeves laughed. “Even the lowly nail, if you know the importance of it, can become exciting.”

WAYNE CURTIS is a contributing editor at *The Atlantic* magazine. His article “The Development of Indigenous Archaeology” appeared in the Fall 2010 issue of *American Archaeology*.

Going Beyond Cultural Resource Management

As if surveying a live bombing range isn't difficult enough, Statistical Research accepts challenges beyond standard CRM work, such as mediating conflicts between development and historic preservation.

By Janice Arenofsky



United States Air Force pilots have honed their bombing skills at the Barry M. Goldwater Range in southwestern Arizona since World War II, frequently dropping live ordnance on targets on the one-million-acre complex. Some 13,000 years earlier, it was occupied by the Clovis, and subsequently by other ancient peoples. And therein lies the problem. The range has an unknown number of archaeological sites that are threatened by ordnance and their recovery, consequently the Air Force hires CRM firms such as Statistical Research, Inc. (SRI), to survey this vast area.

"There are a lot of difficulties associated with working on a military range," said Adrienne Rankin, an archaeologist who works at Luke Air Force Base, which manages the Goldwater Range. Temperatures can reach 110 degrees in the summer, and there are rattlesnakes and scorpions to contend with. That's the easy stuff. SRI has "done work for us in emergencies in which they've mobilized in 24 hours," Rankin said. "That's very unusual. Most CRM companies need a couple of days." She recalled a time when, due to an emergency, a plane jettisoned its fuel tanks over an area that contained a large prehistoric Native American village. SRI quickly fielded a team that was trained in dealing with hazardous materials.

Dressed in protective hazmat suits, they removed the contaminated soil, and then excavated the village. SRI has a handful of OSHA-trained archaeologists on staff, she said, and that's also very unusual for a CRM firm.

Indeed, SRI, in several ways, has set itself apart from the myriad CRM companies in the United States. SRI was founded in 1983 by Jeff Altschul and his wife Debbie, and it now has a staff of roughly 100 with offices in Arizona, New Mexico, California, Texas, and Washington State. It also has a sister company, Nexus Heritage, with two offices in the United Kingdom. It boasts 65 archaeologists with either doctoral or master's degrees. The company offers a full menu of services such as historical and ethnographic research, impact assessment and mitigation plans, and data recovery. In addition to the United States and the United Kingdom, it has worked on projects in Latin America, continental Europe, West Africa, and central Asia.

But in addition to its CRM work, SRI helped establish and supports the SRI Foundation, an independent, non-profit organization, in Rio Rancho, New Mexico, that's devoted to historic preservation. Established in 2001, the foundation's mission is to "advance education, training, public outreach,



SRI excavates the Alameda-Stone Cemetery in downtown Tucson. It was originally thought that the cemetery held approximately 400 graves, but researchers found roughly three times that number.

COURTESY OF PIMA COUNTY

and research in all fields of historic preservation—archaeology, anthropology, history, and historic architecture,” according to the organization’s web site.

“It’s a matter of doing a lot of things that are out of the norm of a typical CRM firm,” said Carla Van West, the foundation’s director of preservation research programs, referring to her organization’s activities. “A lot of it is education and training.” For example, though most archaeology done in America today is CRM work, many students graduating from colleges with archaeology degrees have little or no training in CRM, according to Van West. So the foundation sponsors a Summer Institute in CRM with the University of Maryland. The program consists of one week of classroom instruction followed by a six-week internship.

The foundation also awards grants to doctoral students undertaking dissertation projects involving historic preservation, and it conducts continuing education seminars throughout the country for CRM personnel and government agencies such as the Federal Highway Administration and the Department of Housing and Urban Development. The Foundation also issues “Best Practices” reports on CRM and preservation programs that could be implemented by federal or state agencies.

Another of the organization’s goals is to “make historic preservation work better,” said Lynne Sebastian, director of preservation programs. “We help people find a point of balance between development and heritage—we make it less rigid and bureaucratic and more creative.”

Or to put things more bluntly, “What we do has a lot to do with conflict resolution,” said David Cushman, program manager of historic preservation programs. And there are



Jeff Altschul at Sears Point on the Gila River, Arizona. Altschul is only the second CRM archaeologist to be elected president of the Society for American Archaeology.

many conflicts to be resolved in CRM projects.

Cushman mentioned a major highway construction project in Washington State that led to a disagreement between the Washington Department of Transportation (DOT) and activists working to protect a historic area in Seattle known as Pioneer Square. The Washington DOT is digging a tunnel to route traffic along Seattle’s waterfront, and vibrations from the construction threatened a historic building. The SRI Foundation had been hired to assist the DOT with the federally mandated consultation process. When the DOT recommended tearing down the building for safety reasons, preservationists and neighborhood activists objected. The two sides reached an impasse, so they turned to the foundation,



Tohono O’odham elder Joseph Joaquin (with walking stick) and a tribal member stand next to geoglyphs on the Goldwater range. SRI documented the sites and helped the U.S. Air Force coordinate visits with affiliated Native American groups.

and it negotiated an alternative in which the building would be closely monitored for damage while the digging continued. The DOT agreed to install very sophisticated equipment that can detect the effect of vibrations on the building. It also took other measures to stabilize the structure, to the satisfaction of the activists. "Since the Foundation doesn't have an economic interest—a dog in the fight," said Altschul, "it can get the parties to agree to a solution."

Unlike most other CRM companies, SRI also has its own press, which it's been operating since 1997. SRI Press publishes books on archaeology, history, and heritage management. Upon concluding their fieldwork, CRM firms are required to write reports about their findings for their clients, but the public generally has no access to this information. Altschul founded the press because he wanted to make the results of CRM work available to a wider audience. The press has published five books, and has plans for several more. SRI's most recent title, *Fragile Patterns*, described the archaeology of the Western Papaguería region of Arizona and Sonora, Mexico, noting the diverse cultures that left behind remnants of their adaptations in a hostile, desert environment. It was named one of the Southwest Books of the Year in 2008 by the Pima County Public Library. Altschul said SRI benefits from the many government contracts it receives, "and now the public needs to access this information—this is the mission of the press."

But CRM work remains SRI's primary activity. The company takes on 100 to 200 projects each year, such as their work at the Goldwater Range, which started in 1999. The archaeologists found villages, campsites, ancient roads and trails, mining operations, graves, rock art, and geoglyphs. "People didn't just pass through it—they lived there," said SRI vice president and chief operating officer Teresita Majewski. It's not known exactly when, but at some point Native Americans diverted water from the washes and grew corn. The evidence surprised Rankin, because this is the hottest and driest part of the Sonoran Desert now, and she thinks it also was centuries ago. The researchers have determined that the earliest year-round agricultural settlement dates to approximately A.D. 900.

The Goldwater complex actually consists of seven different bombing ranges, and SRI can only work at each range for six to eight weeks at a time when the range is "cold," meaning no bombs are being dropped. Most of the bombs are inert, but some are live, and during the cold period the unexploded ordnance, which can be above or below ground, is removed from the area and safely disposed of by trained specialists. "The Department of Defense takes dump trucks to priority areas and sweeps for munitions" that are potentially hazardous to surveyors, said Rankin, but they miss the occasional bomb and, even if it's inert, a person can be



SRI archaeologists excavate along U.S. Highway 60 near Superior, Arizona, for the Arizona Department of Transportation. This project studied settlements dating between 350 B.C. and A.D. 1. Evidence of the earliest utilitarian pottery in Arizona was uncovered.

STATISTICAL RESEARCH, INC.

burned by a bomb's phosphorous. So SRI's archaeologists had to be trained to deal with these dangers.

Working near the Mexican border, their surveys were sometimes interrupted by the drama of Border Patrol agents pursuing illegal aliens as well as the tragedy of discovering several bodies of people who died while trying to make their way across the range. "I asked them if their staff needed counseling," Rankin said, "because it was quite horrible." Despite these challenges, SRI has identified 1,300 sites, and the Air Force no longer targets certain areas of the range where the sites are located. Some of the data contributed to the contents of *Fragile Patterns*.

When Pima County wanted to build a new city-county courthouse on 4.3 acres of prime downtown Tucson real estate, it hired SRI to do archival research before construction began. The county's plans were complicated by the fact that in the late 1800s the land served as the city's only public cemetery, known as Alameda-Stone. Prior to beginning fieldwork in late 2006, SRI researched records at libraries, museums and other archival locations for approximately 18 months. In 1881, the cemetery was closed and notices were posted, informing descendants to relocate the graves of their forebears, but due to possible factors such as expense, not seeing the notices, or ignorance of exhumation procedures, most burials were not removed. Regardless, the property was subdivided, sold off, and homes and stores were built atop the cemetery, sometimes destroying burials. A number of buildings still stood on the property, and they had to be torn down.

County officials assumed there were perhaps 400 graves still remaining in the cemetery; however, using birth and death records from the Roman Catholic Diocese, SRI determined that there could be three times that number. "I don't believe they would have ever built it if they had been certain that there were that many remaining graves," said Majewski.

Pima County officials were aware that the excavation of the cemetery could be extremely controversial. They were mindful of the nightmarish 1990s' excavation of the African Burial Ground in lower Manhattan—a site where thousands of enslaved Africans and African Americans had been buried in colonial New York during the 17th and 18th centuries. In that project interested parties such as the African American descendant community and the New York City Landmarks Preservation Commission had not been adequately consulted, and consequently the excavation had little public support. Furthermore, burials were accidentally destroyed during the work, and remains were also vandalized and stolen.

For the Tucson project, Pima County obtained the necessary court orders to excavate as well as state disinterment

This rosary from the grave of an older adult male of Hispanic cultural affinity was recovered during the Joint Courts Archaeological Project.

and re-interment permits. The county also posted notices and held public lectures, media briefings, and interviews; created a dedicated website; held informational tours of the project area for descendant groups, public officials, administrators, and media representatives; and had a site visit and blessing of the project area and burials by Bishop Kicanas of the Roman Catholic Diocese of Tucson.

SRI set up on-site laboratories and used a 3-D laser imaging technology known as LIDAR to map the graves, which they subsequently excavated. Excavations conducted from 2006 through 2008 resulted in the discovery, documentation, and interpretation of 1,083 grave-pit features as well as skeletal materials from more than 1,300 individuals buried in the cemetery. The remains were then analyzed and reburied in accordance with agreements negotiated between the county and the Native American, Anglo, and Hispanic descendants of the deceased.

SRI hired a public relations firm as well as experts that conducted sensitivity training sessions that taught the archaeologists and others involved in the project how to conduct themselves in a respectful manner while dealing with the remains. SRI also fenced off the site to prevent outsiders from observing or taking photographs of the burial excavations. The fieldwork lasted for 18 months and "it was the biggest, most expensive project the county had ever done and they wanted the reburials carried out in a timely way out of



This small red ware bowl with a scalloped rim is believed to be Hohokam and likely dates to A.D. 1250-1350. It was discovered among the rocks during a survey of the Goldwater range.



STATISTICAL RESEARCH, INC.

SRI used a hot air balloon with a camera to photograph sacred geoglyphs on the Golwater range. This was an effective method for photographing the geoglyphs without disturbing them.

respect for the deceased,” Majewski said. The county bought plots in another cemetery where most of the remains were reburied. The Native American remains were repatriated to culturally affiliated tribes.

This project gave SRI “a huge opportunity to learn about the demographics of a frontier city,” said Majewski. SRI’s research plan was designed to answer questions such as: Who was buried there? What does the analysis of their bones and teeth reveal about their lives and deaths? How were people of different social identities and cultural backgrounds treated in death? How does this information speak to conditions in Tucson, which was then a growing, diverse, frontier settlement that had recently become part of the United States?

To answer these questions the researchers determined the age, sex, cultural affinity, and health of the burial population, as well as the organization of the cemetery. They learned that most of the individuals were Hispanic, and there were also European Americans, Native Americans, and a few African Americans. The cemetery was divided into two major areas: a northern portion that was predominantly Catholic and Hispanic and had most of the burials, and a southern area that was mostly European Americans, had far fewer children, and also included a number of military burials.

Numerous religious and ceremonial artifacts recovered from some 225 graves suggested the influence of Catholicism. These items included crosses, crucifixes, medallions, beads, and other elements of fragmented rosaries as well as wire from floral funerary crowns.

Tucson had problems that were common among other cities during this time, such as poor sanitation, that contributed to high rates of morbidity and mortality. Infants and young children were particularly affected by infectious disease. Evidence of skeletal trauma was plentiful, but most of it, contrary to frontier lore, appeared to result from work and accidents rather than shootouts. More than two-thirds of the individuals with skeletal injuries were buried in the southern area.

On the positive side, these individuals, generally speaking, had reasonably healthy diets, though those diets differed from north to south. Tooth decay was higher in the southern area, and nearly all evidence of dental work was found there. Dental wear, conversely, was greater in the north.

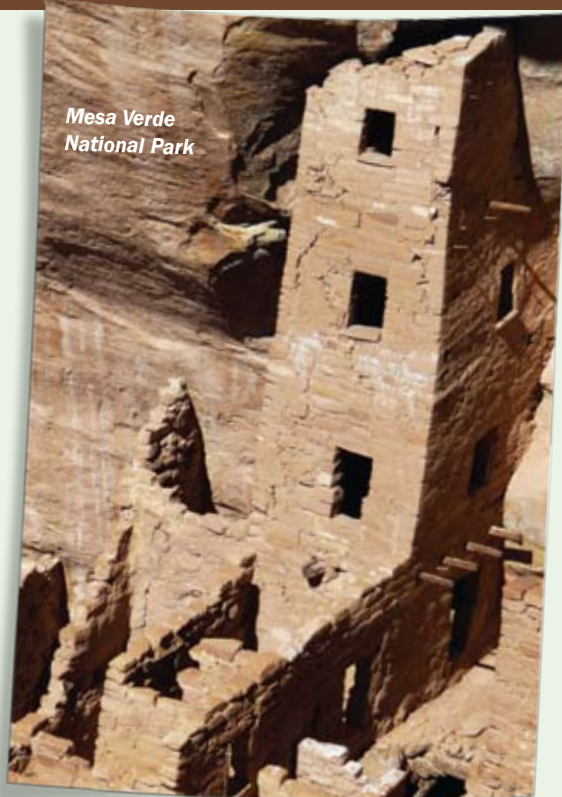
The arrangement of the cemetery reveals an obvious division between the local Hispanic community and outsiders, most of whom were probably not active in the Catholic Church and probably were affiliated with outside populations. This division appears to reflect the economic, social, and political divisions between the city’s Mexican Americans and European Americans that grew after the cemetery closed.

SRI Press and Left Coast Press will co-publish a book about the project titled *Uncovering Identity in Mortuary Analysis*. The book, which is meant for archaeologists and the public, is intended to serve as a model for future excavations of historical cemeteries.

Janice Arenofsky is a writer based in Scottsdale, Ariz. Her work has appeared in national publications such as *Scientific American*.

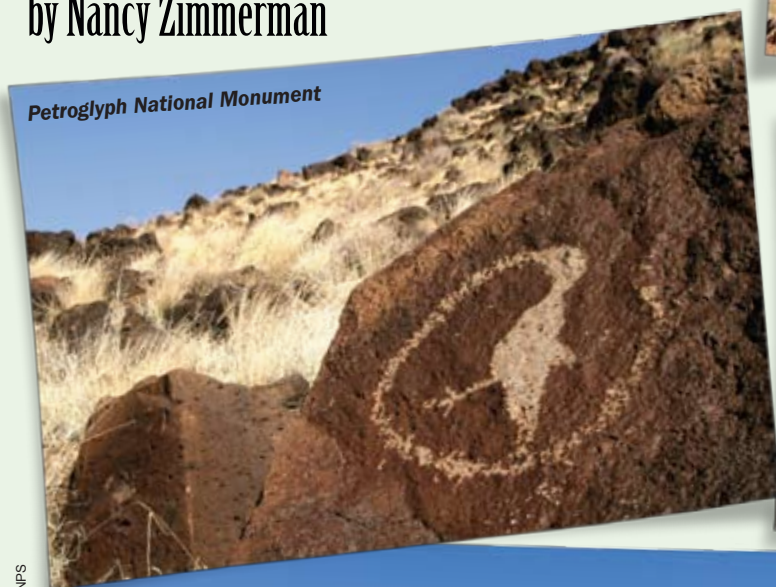
Seeing the Amazing Southwest

by Nancy Zimmerman



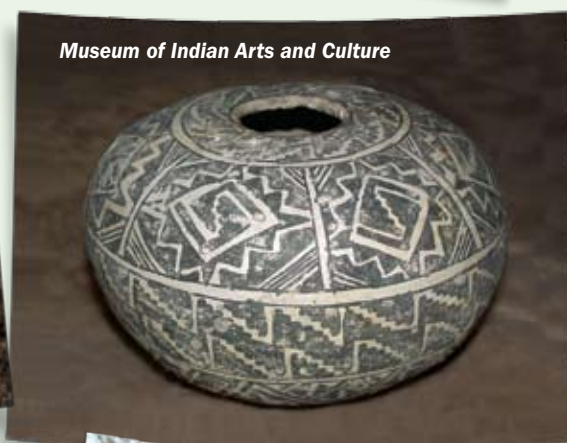
Mesa Verde National Park

MATT SCHULZE



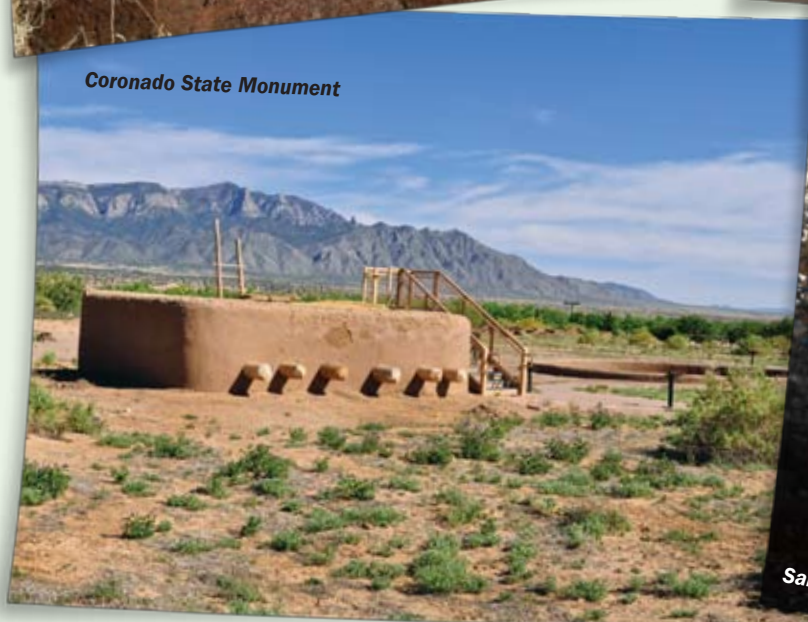
Petroglyph National Monument

NPS



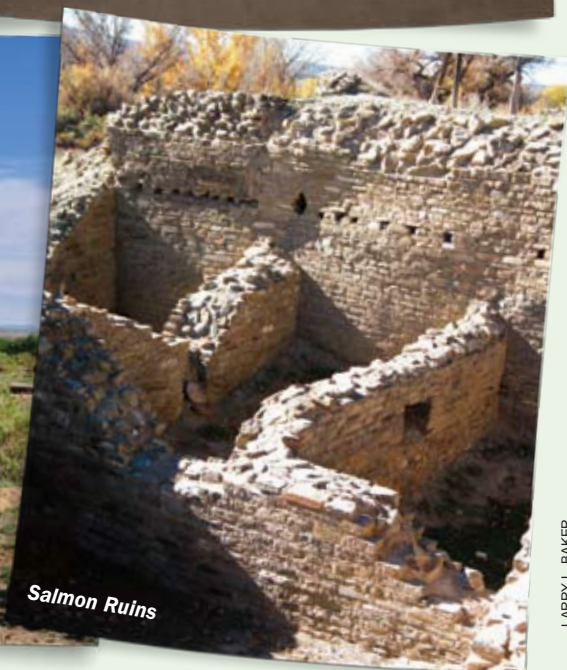
Museum of Indian Arts and Culture

MUSEUM OF INDIAN ARTS & CULTURE



Coronado State Monument

NEW MEXICO STATE MONUMENTS



Salmon Ruins

LARRY L. BAKER

An archaeological road trip through New Mexico and the Four Corners region offers spectacular ruins and other remnants of ancient cultures that tell us a great deal while leaving much untold, making for a thought-provoking travel experience. Eagerly anticipating this excursion into the past, we set out on the 1,000-mile loop drive that would take us from Albuquerque through Santa Fe and on to southern Colorado, eastern Arizona, and back. My partner, Matt, and I laid in a supply of drinking water, sunscreen, and a couple of hats to shield us from the high-desert sun, and off we went to visit some of our favorite sites as well as a handful of new ones.

We didn't have to go far to get into the spirit of things. Our first stop was at Albuquerque's **Petroglyph National Monument**, a 17-mile stretch of volcanic basalt escarpment known as the West Mesa, bounded by dormant volcanoes and home to an estimated 24,000 images carved into the rocks by Native Americans and Spanish settlers some 400 to 700 years ago. We had a choice of several hiking trails, each of them providing an informative narrative via audio tour sent directly to our cell phones. We got a good overview of the site at Boca Negra Canyon, where three self-guided trails amid some 200 petroglyphs take about an hour to walk. Awed by the prolific artistic expression all around us, it was easy to forget we were also surrounded by a large, modern city.

From Albuquerque, it was a 16-mile drive to **Coronado State Monument**, just a mile west of the town of Bernillo. The site features the ruins of Kuaua Pueblo, settled about A.D. 1300 along the banks of the Rio Grande and abandoned in the late 1500s to early 1600s. An interpretive trail leads you through the ruins, which include a rare square kiva that you can climb into. An even bigger treat is the array of 15 murals on view at the visitor center that are thought to be among the finest examples of pre-Columbian Native American art in North America. The artists' sophisticated depictions of pueblo life dispel any misconception that these people were "primitive."

After an hour or so at Coronado, we headed to I-25 for the 47-mile jaunt to Santa Fe, the state's 402-year-old capital and home to some excellent museums. We started our exploration at the **Palace of the Governors**, Spain's seat of government in the American Southwest. The palace was built in the early 1600s and it's the oldest continuously occupied government building in the country. It was turned into a museum in 1909, and now shares the spotlight with the stunning **New Mexico History Museum**, which opened next door in 2009. The history museum covers every era from prehistory to the atomic age and modern times. This is state-of-the-art stuff, with interactive computer programs, films, lectures, and workshops, so you may want to spend several hours here. Admission is \$9 (\$6 for New Mexico residents), or you can buy a \$20 pass, good for four days, that also gets you into the New Mexico Museum of Art, the Museum of International Folk Art, and the **Museum of Indian Arts & Culture**.

These last two are up on Museum Hill, part of an impressive complex not far from downtown that also includes the Wheelwright Museum of the American Indian and the Museum of Spanish Colonial Art. At the Museum of Indian Arts & Culture you'll want to spend some time viewing the exceptional displays of pottery, textiles, tools, and other art forms ranging from ancient to contemporary. What struck me was the cultural continuity of this work, and the innovation shown by the contemporary artists who've built on the legacy of their ancestors to keep the art forms alive and relevant.

We dawdled in Santa Fe for a couple of days to take advantage of the excellent dining opportunities before hitting the road again and going 28 miles north to **Santa Clara Pueblo** and the remarkable Puyé Cliff Dwellings, the ancestral home of the Santa Clara people that sheltered more than 1,500 residents from A.D. 1100 until the latter part of the 15th century. We checked in at the Welcome Center to pay our fee (\$7 to visit the museum housed in a former Harvey House and view the cliffs from below; \$35 for a guided tour to visit the cliff dwellings themselves and to climb to the top), then drove seven miles up through the juniper-dotted landscape to the site. You can take a shuttle to the mesa top or, accompanied by a guide, climb up the ladder from the cliff, and either way it's worth it to take in the sweeping vista of the Sangre de Cristo Mountains to the east and the Rio Grande below.

From Santa Clara we continued for 25 miles along NM 30 to **Poshuouinge**, an ancestral Tewa pueblo, partially excavated in the early 20th century, just outside of the village of Abiquiu in the Rio Chama Valley. Ancestors of the present day Tewa Pueblos in the Espanola Valley settled there between A.D. 1350 and 1450. The site was also used by later Apache, Ute, and Hispanic people as a campsite and a lookout. A moderately steep half-mile trail leads to the top of a mound with two lookout points from which you can discern the outlines of the pueblo below that once encompassed multistoried dwellings, with more than 700 ground-floor rooms and two large plazas. The trail and interpretive signs are managed by the Espanola Ranger District of the Santa Fe National Forest. Visitors are encouraged to stay on the trail and enjoy the view from both trail overlooks.

We stopped off in Abiquiu, where the famous artist Georgia O'Keeffe once resided (her former home can be seen from the highway), for an early lunch at the Abiquiu Inn, the last chance for food and lodging until our next stop, Chaco Canyon, 287 miles away. The drive from Abiquiu along NM 96 is a particularly lovely one that winds west through the tiny villages of Coyote, Gallina, and Regina, and bucolic farmland before connecting with US 550, where we turned northward toward Chaco. We took the turnoff at County Road 7900 and drove 21 miles, mostly on unpaved road, to reach the new visitor center, then we set off on the nine-mile paved loop road that led us to five major sites and the walking trails that snake around the various ruins.

Chaco Canyon (Its official name is Chaco Culture

National Historical Park) is a UNESCO World Heritage Site and perhaps New Mexico's greatest archaeological treasure, and even after multiple visits it continues to impress. (An image of Chaco's Chetro Kettle graces a new quarter that is part of the U.S. Mint's America the Beautiful Quarters Program.) Believed to be a giant hub for ceremonies and trade from roughly A.D. 850 to 1150, at its peak it encompassed more than a dozen great-house pueblos, some of them four-stories high, with more than 600 rooms that could have accommodated large ceremonies or other public events with as many as 4,000 people.

The elaborate road system connecting it with great house communities as far as 100 miles away suggests a complex of great importance, and excavated remains of tropical birds like parrots and macaws indicate there was trade with people as far south as northern and central Mexico. Chaco is particularly renowned for its carefully wrought stacked-stone masonry and astronomical alignments that speak to an advanced knowledge of architecture, astronomy, geometry, and engineering.

It's also a place of mysteries, one of them being that, despite the many large structures, there's little evidence that a large population resided here. Some experts hypothesize that Chaco's core area served administrative, economic, and ritual purposes that integrated people residing in the Four Corners region.

Reluctantly, we cut short our reverie and made our way back to the highway. En route to Bloomfield, the somewhat nondescript town where we were to spend the night at a serviceable Super 8 Motel, we took the brief detour to Twin Angels Overlook, where sandstone rock formations, known as Twin Angels, can be seen. Beyond the rock formations are the ruins of a Chaco outlier that's also called Twin Angels.

In the morning we visited Bloomfield's star attraction, the spectacular **Salmon Ruins**, another Chaco Canyon outlier situated two miles west of Bloomfield on US 64 on a terrace overlooking the farmland of the San Juan River Valley. Named for George Salmon, an 1880s' homesteader who discovered the site and protected it from thieves and vandals, the ruins sit at one end of a 50-mile road that once extended to Chaco. The site was built between A.D. 1088 and 1100, and abandoned circa 1275. As impressive in its compactness as Chaco is in its grandness, Salmon feels less desolate, more habitable and intimate. You can also visit the Salmon homestead and the small but informative Salmon Ruins Museum at the visitor center.

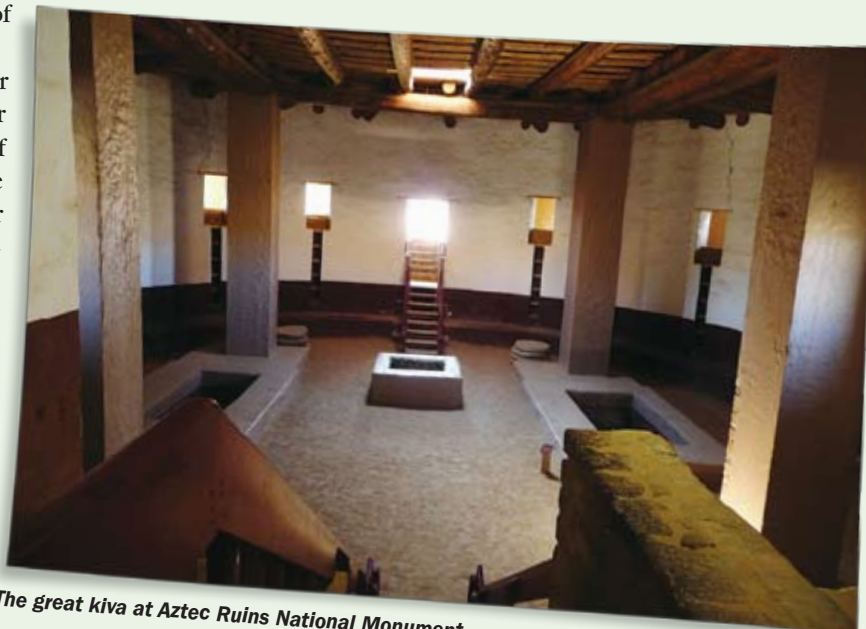
From there we made the nine-mile drive to the small town of Aztec, notable for its tiny but carefully restored historic downtown and an



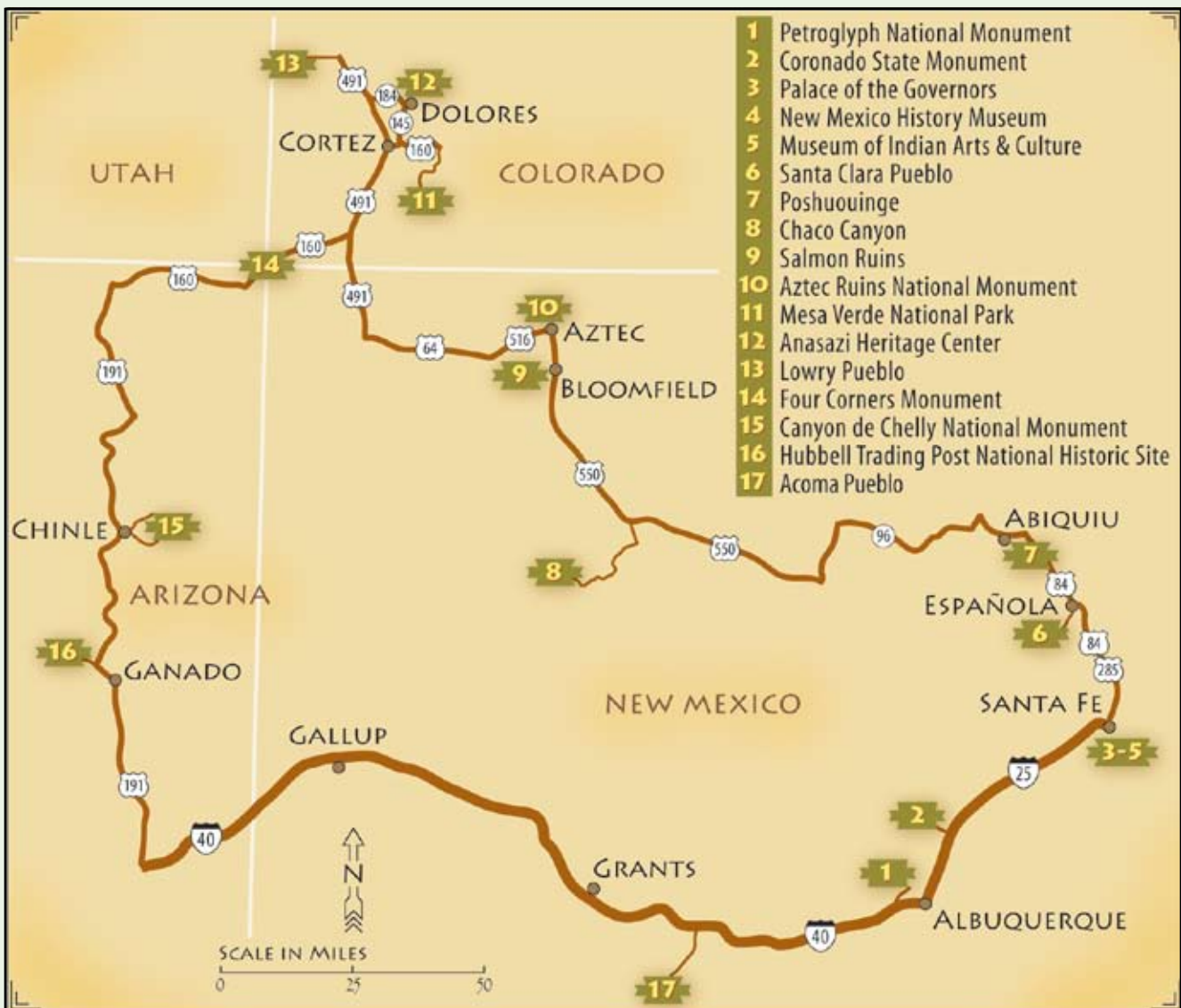
New Mexico History Museum



Puye Cliff Mesa at Santa Clara Pueblo



The great kiva at Aztec Ruins National Monument



JAN UNDERWOOD

1 Petroglyph National Monument
6001 Unser Blvd. NW, Albuquerque, N.M.
(505) 899-0205, www.nps.gov/petr

2 Coronado State Monument
485 Kuaua Rd., Bernalillo, N.M.
(505) 867-5351, www.nmmonuments.org

3 Palace of the Governors
105 West Palace Ave., Santa Fe, N.M.
(505) 476-5100, www.palaceofthegovernors.org

4 New Mexico History Museum
113 Lincoln Ave., Santa Fe, N.M.
(505) 476-5200, www.nmhistorymuseum.org

5 Museum of Indian Arts & Culture
710 Camino Lejo, Santa Fe, N.M.
(505) 476-1250, www.indianartsandculture.org

6 Santa Clara Pueblo
Rio Arriba County, N.M.
(505) 753-7330
www.indianpueblo.org/19pueblos/santaclara.html

7 Poshuouinge Ruins
Abiquiu, N.M.
www.newmexico.org/learn/archeology/poshuouinge.php

8 Chaco Canyon
Nageezi, N.M.
(505) 786-7014 x 221, www.nps.gov/chcu

9 Salmon Ruins
6131 Hwy. 64, Bloomfield, N.M.
(505) 632-2733, www.salmonruins.com

10 Aztec Ruins
84 County Rd. 2900, Aztec, N.M.
(505) 334-6174, www.nps.gov/azru

11 Mesa Verde National Park
Mesa Verde, Colo.
(970) 529-4465, www.nps.gov/meve

12 Anasazi Heritage Center
27501 Colorado 184, Dolores, Colo.
(970) 882-4811,
www.blm.gov/co/st/en/fo/ahc.html

13 Lowry Pueblo
27 miles northwest of Cortez, Colo.
(970) 882-5600
www.blm.gov/co/st/en/fo/ahc/archaeological_sites/lowry_pueblo.html

14 Four Corners Monument
6 miles north of Teec Nos Pos, Ariz.
www.navajonationparks.org/htm/fourcorners.htm

15 Canyon de Chelly National Monument
Chinle, Ariz.
(928) 674-5500
www.nps.gov/cach/index.htm

16 Hubbell Trading Post National Historic Site
Hwy. 264 Ganado, Ariz.
(928) 755-3475
www.nps.gov/hutr/index.htm

17 Acoma Pueblo
Cibola County, N.M.
(505) 552-6004, www.puebloofacoma.org

original A&W root beer stand, complete with carhops. We stopped for lunch at Rubio's Mexican Restaurant, which was no more Mexican than the town of Aztec is Aztec, but a big improvement over the ubiquitous fast-food outlets.

The next site was **Aztec Ruins National Monument**, yet another impressive Chaco outlier, situated along County Road 2900 on the edge of town. The three-story, 450-room West Ruin wowed us with its 900-year-old roof timbers, exquisite masonry, and the Great Kiva, constructed in the 12th century and so well reconstructed in 1934 that it felt almost like a modern building.

We hit the road again, opting to go west on US 64 to US 491 north for the 86-mile drive to the amiably funky town of Cortez, Colorado, and the nearby **Mesa Verde National Park**. Had we more time we could have chosen US 550 via Durango, or the more leisurely rural back roads through the small towns of La Plata and Hesperus. We stowed our stuff at the White Eagle Inn, a spotlessly clean 1950s'-era motel on the edge of town, then immediately drove the nine miles east to the park. We started along the circuitous road that wound its way up the mesa, yielding jaw-dropping views of the San Juan Mountains and the valley below at every switchback.

Passing the aptly named Far View Inn, where we would have spent the night had it been available (reservations are essential), we set off on one of the loop drives with regular turnouts where you can stop to absorb the mind-blowing sight of 700-year-old sandstone cities wedged into the rocky cliffs. The Mesa Top Loop Road is a six-mile route that took us to 12 stops that featured pithouses along the rim of the mesa and overlooks for viewing the cliff houses, the most notable of which is Cliff Palace.

One of the drive's most spectacular stops, Sun Point Overlook, offered a panoramic vista across a canyon of 12 major dwellings whose exquisite details were revealed by the free telescopes conveniently placed at the lookout. As the ruins come into focus, one can imagine what the canyon was like when it was alive with the activity of its industrious residents.

With such a variety of hikes, guided and self-guided tours, museums, and loop drives, we could easily have extended our visit or returned for another day of exploration, but there was more to see in the area and the road beckoned. We retraced our route back through Cortez, stopping for a burger and beer at the Main Street Brewery, then returned to our retro sanctuary for the night.

On our way out of town the next morning we stopped at Notah Diné Trading Company and Museum on Main Street to inspect the vast collection of Navajo-made silver and turquoise jewelry, rugs, and assorted trinkets and treasures. The quirky museum features a dusty collection of antique cradleboards, beaded toys, baskets, kachinas, an old still, and even the well-preserved scalp of an unfortunate young woman.

We then drove 10 miles north to Dolores, site of the **Anasazi Heritage Center**, a museum and research center run by the Bureau of Land Management. This excellent facility, which has a hands-on activities area designed for kids that also appeals to

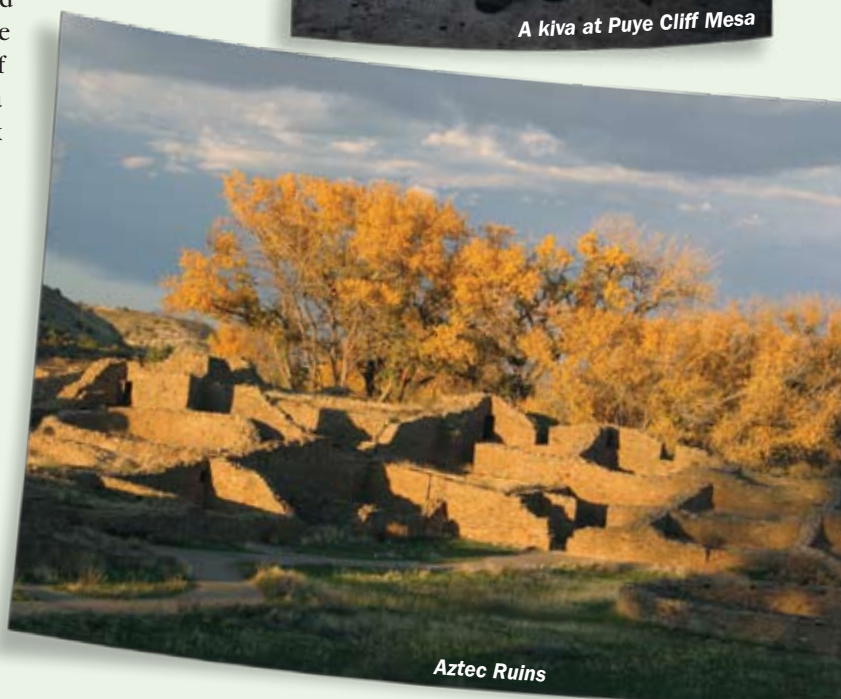
american archaeology



Anasazi Heritage Center



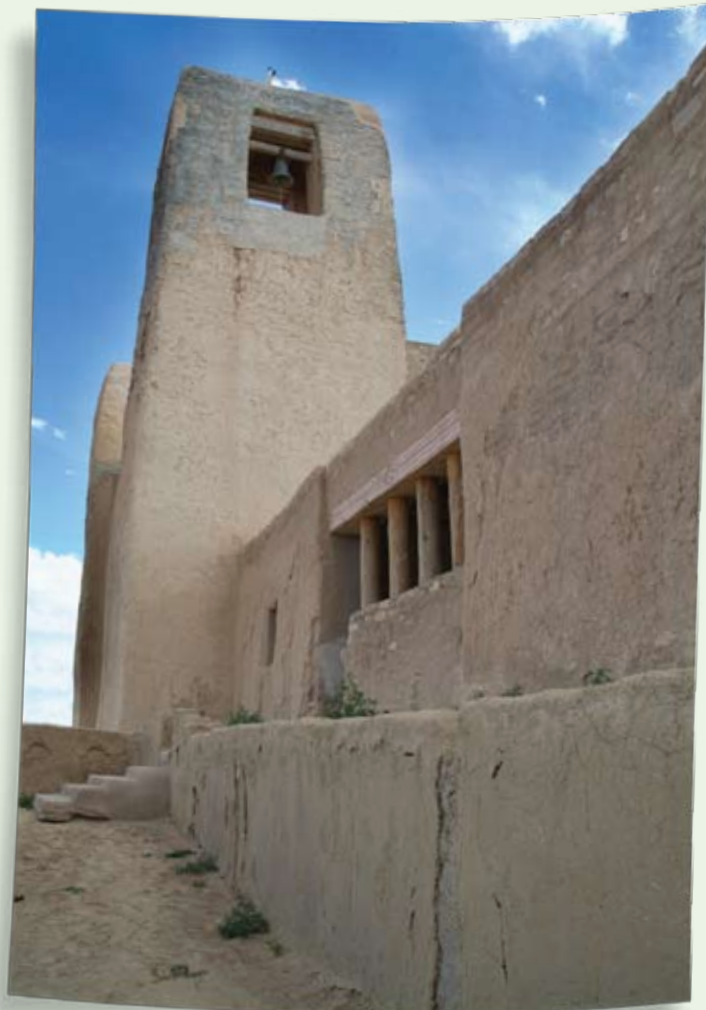
A kiva at Puye Cliff Mesa



Aztec Ruins



Pueblo del Arroyo at Chaco Canyon



Acoma Pueblo

adults, gave us a detailed overview of the cultural history of the Canyons of the Ancients. In front of the center sits the remains of the Dominguez site, constructed around A.D. 1123 and now reduced to a mere four rooms with low stone walls. A half-mile walk up the hill beside the center took us to Escalante Pueblo, which was occupied by three successive waves of residents. First constructed in 1129 as part of the Chaco Canyon trading network, it was abandoned shortly thereafter and then reoccupied around 1150, then again around 1200. Its views of Sleeping Ute Mountain and the surrounding landscape took our breaths away.

NPS

From there we continued another 20 miles on US 491 northwest to Pleasant View, branching off at County Road CC onto the nine-mile unpaved stretch leading to **Lowry Pueblo**, which is part of Canyons of the Ancients National Monument. Lowry's great house has more than 40 rooms and a number of kivas. There is also a great kiva nearby. Its masonry and architecture suggest it was influenced by Chaco Canyon, making it one of the northernmost Chaco outliers.

We then traveled back through Dolores and Cortez, enjoying the ever-shifting views of Ute Mountain, to hook up with US 160 and head over to the **Four Corners Monument** at the meeting point of Colorado, New Mexico, Utah, and Arizona. After completing the obligatory ritual of getting down on all fours to occupy all the states at once, we browsed the many crafts booths staffed by Utes and Navajos, picked out an inexpensive but lovely necklace, and piled back into the car for the 97-mile drive to our next stop, **Canyon de Chelly**, in Chinle, Arizona. We checked into the charming Thunderbird Lodge, a former trading post situated near the canyon rim, and set out to visit the canyon.

Actually a series of four connected canyons, Canyon de Chelly has been continuously populated for some 4,000 years, first by the Anasazi, later by Hopis and Navajos. It is one of the most evocative sites of the Southwest, perhaps because, while grand in scale, it's also more intimate than the Grand Canyon and more accessible, although equally beautiful.

If you're short on time you can take the rim drives to enjoy the many perspectives, especially the South Rim Drive's view of Spider Rock and Face Rock, twin 800-foot towers. Spider Rock is the legendary home of Spider Woman, a key figure in Navajo mythology. But it's worth it to head down to the floor of the canyon, via guided jeep or horseback tours, to view the fruit orchards and farms, the pictographs and petroglyphs on the cliff walls, and the ruins. You don't need a guide to hike the two-mile roundtrip trail (fairly easy going down, strenuous coming back up) to the White House Ruins, a remarkably preserved

ACOMA BUSINESS ENTERPRISES, GRAPHICS DEPARTMENT

Chaco outlier dating from about A.D. 1200 carved into the stone wall at the foot of a sheer, 500-foot-high cliff.

The next day we started our leisurely return to New Mexico, stopping first at the storied **Hubbell Trading Post** in Ganado, Arizona, to enjoy the historic atmosphere of the oldest active trading post on the Navajo Nation, now a National Historic Site. Still an important source of supplies for area residents, Hubbell is best known for its fine selection of Navajo textiles, a reputation established by John Lorenzo Hubbell in 1878 when he founded the post to initiate trade between the Navajos and the Anglo settlers. It was he who encouraged the Navajos to create silver jewelry, blankets, and rugs specifically for trading purposes, and an enduring artistic tradition was thus begun.

Back on the road we took US 191 south to I-40 and drove another 54 miles east into Gallup, a major stop on the old Route 66. If you have time, a fun place to visit is the lobby of El Rancho Hotel and Motel, the once grand and still comfortable lodgings where movie stars like Humphrey Bogart, Doris Day, Kirk Douglas, and John Wayne used to hang their hats when filming westerns in the region.

Ninety miles later we reach the turnoff to **Acoma Pueblo**, a settlement atop a 367-foot sandstone mesa that's been continuously occupied since A.D. 1150. Referred to as Sky City, its features include adobe houses, plazas, narrow walkways, stunning views of the valley below, and the 17th-century church of San Esteban del Rey. We checked in at the visitor center and bought tickets (\$20 per adult) for the brief van ride up the mesa and the walking tour (no self-guided tours allowed) led by an Acoma native, one of the pueblo's 30 remaining full-time residents. Life at the top has unique challenges, and the guide did a good job of conveying the hardships and advantages of the secluded but strategic site. We left with renewed admiration for the ingenuity and bravery of these people who, unlike modern societies that disrupt nature to suit their needs, adapted their lives to their geography and created a lasting culture in the process.

As we sped the final 64 miles back into Albuquerque along I-40, it felt as if we were emerging from a time machine as we watched the vast and mysterious landscape disappear behind us through the rearview mirror.

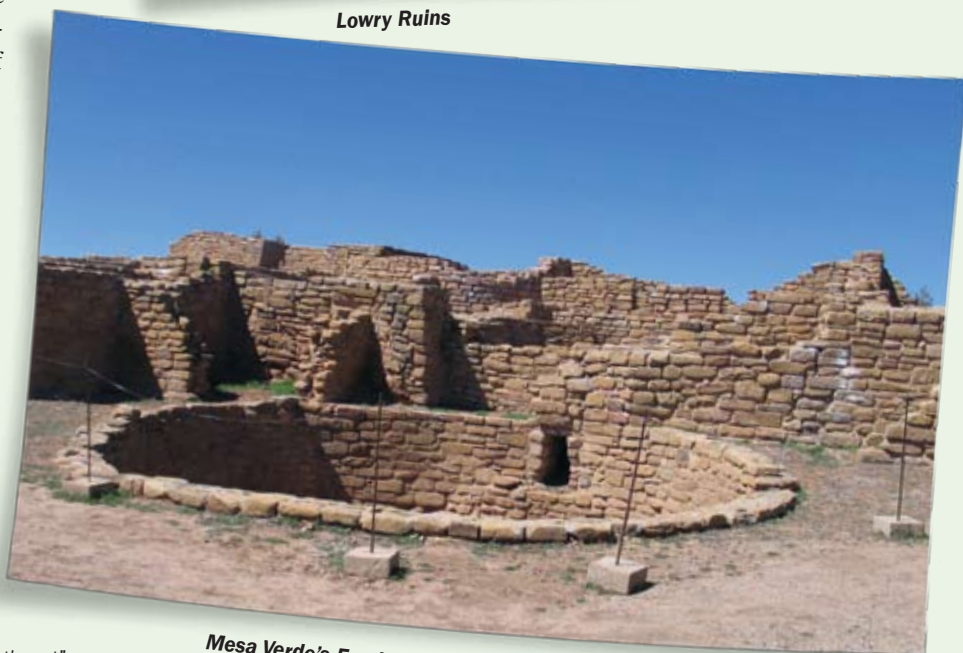
NANCY ZIMMERMAN is a freelance writer, editor, and translator based in Tesuque, New Mexico. Her article "Experiencing the Best Of The Southwest" appeared in the Spring 2011 issue of *American Archaeology*.



Hubbell Trading Post

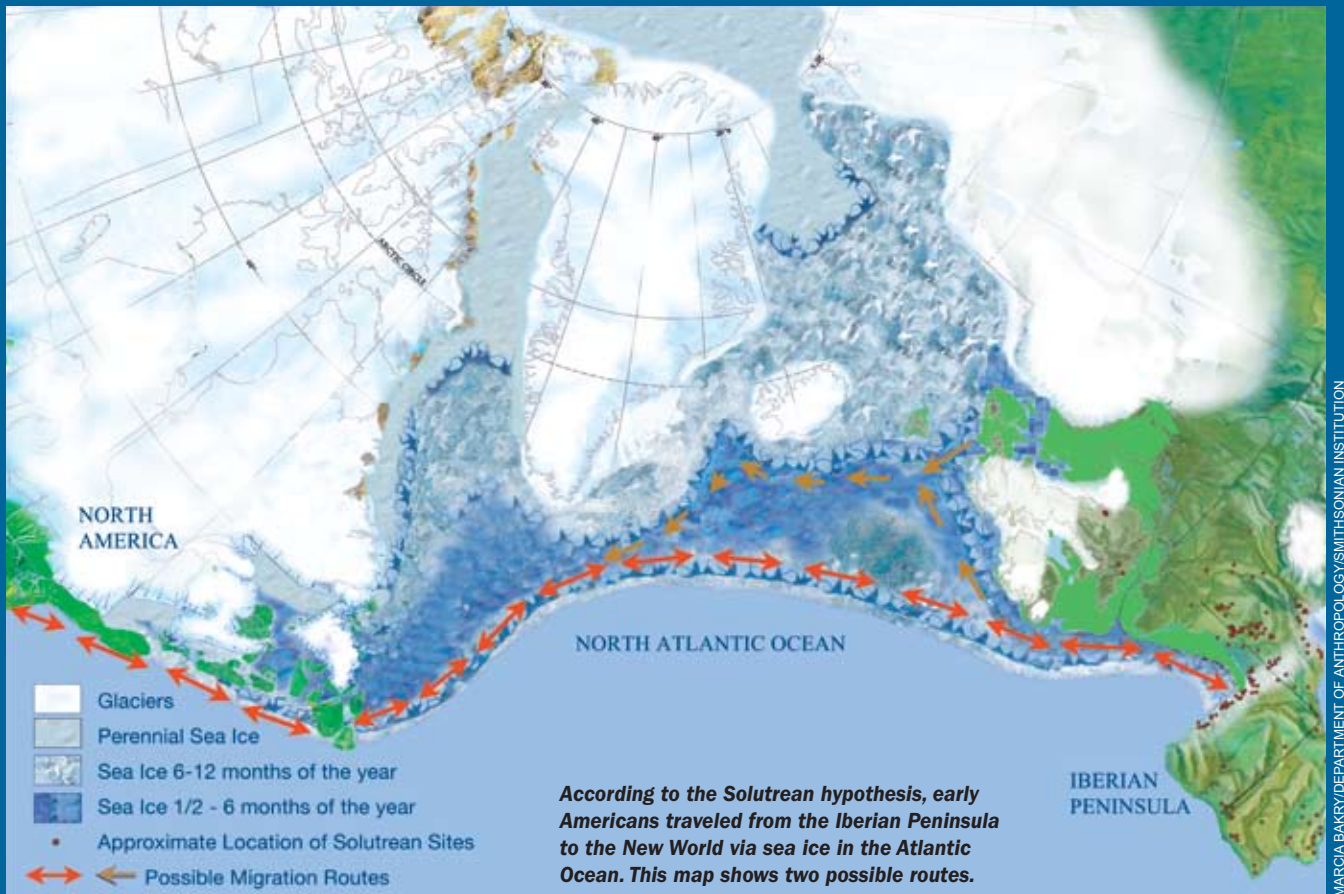


Lowry Ruins



Mesa Verde's Farview House

Iberia, Not Siberia?



A new book questions conventional wisdom by arguing that the Clovis culture derived from European, not Asian, immigrants.

By David Malakoff

While working in Alaska some years ago, archaeologist Dennis Stanford watched a small group of Inuit villagers set out to sea in an umiak, an open boat traditionally made of animal hides stretched over a wood or whalebone frame. "It had to have been 40 degrees below freezing that day, with

the winds at 20 knots," he recalled recently. Ice fringed the shoreline. "It might seem crazy to a lot of people, but they knew how to handle the climate."

Today, Stanford believes similarly frigid voyages some 20,000 years ago helped carry some of North America's first

human settlers across the Atlantic Ocean from Europe. These ice age colonists, known as Solutreans, navigated along sea ice. They brought with them stone tools and weapons that enabled them to make a life in their harsh but bountiful new world. Then, over generations, the Solutreans helped give birth to North America's widespread Clovis culture, which produced distinctive stone projectile points that began to appear in the archeological record about 13,500 years ago.

"The best explanation for the origins of Clovis is that it had a European ancestor that crossed the North Atlantic," said Stanford, a curator of North American archaeology at the Smithsonian National Museum of Natural History in Washington, D.C. and a prominent Paleo-Indian scholar. "It begins with the Solutreans."

It's a bold and highly contentious hypothesis. Bold because it flies in the face of the conventional thinking that Clovis arose from immigrants who traveled to North America from Asia, across a land bridge that once connected modern-day Siberia to Alaska. Contentious because many archeologists believe the Solutrean hypothesis is, to put it politely, bunk. "It is not science, it's a just-so story," said David Meltzer of Southern Methodist University in Dallas, Texas.

Despite such criticism, for more than a decade Stanford and his collaborator, archeologist Bruce Bradley of the University of Exeter in the United Kingdom, have been persistently

asserting that the Solutrean hypothesis deserves careful examination. And earlier this year, they made their case more forcefully than ever before, publishing *Across Atlantic Ice: The Origins of America's Clovis Culture*. Stanford and Bradley argue that it is time to systematically reconsider prevailing ideas about when early Americans arrived and where they came from. "Our guess is that no one would question the Solutrean origin of Clovis if Solutrean sites were found in northeastern Asia instead of southwestern Europe," they wrote. And they dismiss the idea that their hypothesis "has been adequately tested, and rejected."

Some archaeologists agree. "The origin of Clovis culture is still very much an open question," and *Across Atlantic Ice* makes "a very plausible case for European contact on the Eastern seaboard," said Albert Goodyear, an archaeologist at the University of South Carolina in Columbia. It will take more evidence for the authors "to completely win over fellow archaeologists," he added. "But they do have some intriguing data."

The Solutrean hypothesis isn't new. "Actually, it's an old theory revisited," Bradley said. Over the last century, a number of archeologists have suggested that America's earliest immigrants might have come from Europe. And a few noted that some stone points found at Clovis sites around North America look a great deal like those found at sites in western



DENNIS STANFORD

A group of Inuits set out in the Arctic Ocean in a traditionally-made boat in sub-zero weather. Pack ice is seen on the horizon. Dennis Stanford and Bruce Bradley theorize that small groups of people could have crossed the Atlantic in similar conditions thousands of years ago.



Bruce Bradley and Dennis Stanford examine lithic artifacts.

Europe that are linked to the Solutrean culture, which flourished about 24,000 to 17,500 years ago. The Solutreans get their name from artifacts discovered in 1866 at a site in the Solutré district of eastern France. Since then, researchers have found Solutrean-era points, bone tools, and artwork—often painted on cave walls—across France and the Iberian Peninsula (Portugal and Spain).

In the 1940s, archaeologist Frank Hibben argued that stone points he had found in Sandia Cave in New Mexico had strong Solutrean attributes, and suggested they supported a European origin for America's first inhabitants. That claim, controversial at the time, was ultimately discredited. Ironically, Bradley is one of the archaeologists who helped rebut Hibben's claim decades after it was made. A world-renowned expert on ancient stone tool manufacture and a skilled flintknapper, Bradley examined Hibben's finds and suggested that someone had used a grinder to make some of the points appear more Solutrean in style.

As Bradley conducted his own research in both North America and southwestern Europe, however, he continued

to be struck by similarities between Solutrean and Clovis technologies. Both types of stone points are thin and bifacial, meaning flaked on both sides. And the makers of both used a relatively unusual shaping method, which involves removing flakes of stone that stretch from one edge of the point to the other, and wrap around an edge.

In the mid-1990s, Bradley and Stanford began discussing exactly what those similarities might mean. In the summer of 1996, Stanford had toured a number of Clovis sites in the Eastern United States, including Cactus Hill near Richmond, Virginia. Along with typical Clovis points, which have telltale grooves, known as flutes, at their bases, Cactus Hill yielded stone points that were dated to 16,000 years ago, making them pre-Clovis. Those artifacts were part of an array of discoveries that were beginning to seriously undermine the conventional thinking that the Clovis were the first Americans. A number of archaeologists were coming to the conclusion that Clovis had replaced, or evolved from, some other pre-existing, but poorly understood, culture.

A few weeks after seeing the Cactus Hill points, Stanford traveled to Solutré in France for an exhibition comparing artifacts from Clovis and Solutrean caches. Stanford "was especially struck by the astonishing similarity" between some Solutrean points from Spain and those from Cactus Hill, the authors recount in

Across Atlantic Ice. "Could the ancestors of Clovis have been the Solutrean people of Europe rather than the long-sought Asians?" Soon, Stanford and Bradley were talking, formulating their nascent hypothesis.

In part, their thinking was shaped as much by what they hadn't seen as by what they had. Stanford, in particular, had spent "a good third of my career looking for Clovis origins in the Arctic, and we hadn't found anything that reminded us of Clovis at all." He wasn't alone: Other archeologists had also failed to find stone points in Alaska or Siberia that showed clear signs that Clovis biface technology was derived from Asia. "It became crystal clear to me that Clovis was a New World thing, that it was home grown, and that it had nothing to do with the Arctic," Stanford said. "And the whole West Coast has very little evidence of Clovis, and the East Coast has tons of it." As a result, Stanford began to look east for Clovis ancestors.

By 1999, Stanford and Bradley were ready to go public at a packed "Clovis and Beyond" conference held in Santa Fe,

New Mexico. In a talk cheekily entitled “Iberia, Not Siberia,” Stanford laid out their case. Besides the stone points made by similar complex manufacturing techniques, both Solutrean and Clovis caches included seemingly identical hide-scraping stones, blade cores, bone and ivory points, and decorated stone tablets. Although the North Atlantic would have been cold when the Solutreans made their journey at the height of the last ice age, Stanford noted the Inuit and other cultures had long ago mastered the art of cold weather voyaging.

Some Native Americans, they added, carried a genetic marker called haplotype X, which has been traced back to Europe. And they weren’t especially bothered by what appeared to be a theory-killing gap between the disappearance of the Solutreans some 17,500 years ago and the appearance of the Clovis roughly 13,500 years ago. Cactus Hill and other pre-Clovis sites, such as Meadowcroft Rockshelter in Pennsylvania, were yielding semi-Solutrean artifacts that appeared to be at least 16,000 years old, they noted, suggesting these points could represent a transition from Solutrean to Clovis technology.

Few archeologists in the crowd were fully convinced,

according to several who were there. “I was sitting there listening, kind of skeptical, but I wasn’t a naysayer,” recalled Andy Hemmings of the Mercyhurst Archaeological Institute in Erie, Pennsylvania (he still isn’t). Others were similarly intrigued. “I don’t understand these convergences, and I think they deserve much further investigation,” archaeologist Leslie Freeman of the University of Chicago (now emeritus) told a reporter from the journal *Science*.

Others, however, were dismissive. “Preposterous,” Lawrence Straus of the University of New Mexico, Albuquerque told the same reporter. “The tone quickly became ugly,” recalled Michael Collins of Texas State University in the foreword he wrote for *Across Atlantic Ice*. Collins believes the hypothesis merits consideration, but after Stanford’s talk, one colleague leaned over and told him: “I just hate seeing Dennis [Stanford] throw away his career like this.” Another muttered: “Just show me the boats. Where are the boats?”

It was just the beginning of what would become a long-running debate. Over the next decade, Stanford and Bradley would spar regularly with critics, including Straus, Theodore Goebel of Texas A&M University, and Meltzer, who launched



CHIP CLARK

These are two sides of a Solutrean-style stone blade that were dredged up with mastodon remains by a fishing boat named Cinmar in the Chesapeake Bay. The blade is approximately 23,000 years old.



This roughly 21,000-year old quartzite blade was recovered from the Miles Point site in Maryland.

periodic attacks on the Solutrean hypothesis. Europe was “an impossible” source for Clovis traditions due to the time gap, the glaciation, and the difficulty of travel, Straus concluded in a 2000 review of the evidence in the journal *World Archaeology*. Moreover, Solutrean and Clovis stone points are arguably more different than similar, he contended, and any similarities were likely the result of two different cultures finding “similar solutions to similar functional problems” using similar materials.”

The critics also have argued that essentially all of the other available evidence, from studies of genes to teeth to languages, points to an early influx from Asia. A 2011 genetic



Researchers work at Meadowcroft Rockshelter in Pennsylvania, which has yielded artifacts with Solutrean characteristics.

analysis in the *American Journal of Physical Anthropology*, for instance, “definitively dismisses” the argument that the haplotype X gene marker, which is found in the cell’s mitochondria, supports the Solutrean hypothesis. “The DNA evidence does not support a colonization from Europe; currently all of the evidence points to Beringia and/or Northeast Asia as the ancestral homeland,” added Ripan Malhi, a geneticist at the University of Illinois, Urbana-Champaign, who studies ancient migrations. For their part, Stanford and Bradley say there simply isn’t enough DNA from old enough skeletons to know for sure, especially if small groups of Solutreans ultimately interbred with much larger populations originating later from Asia. “Maybe they got swamped, genetically,” said Stanford.

Meanwhile, a 2008 study of ancient weather in the *Journal of the North Atlantic* largely rejected the idea that Solutrean sailors could have followed a navigable corridor of the Atlantic to North America. “The corridor may not have existed, and, if it did, its suitability as a migration route is highly questionable,” the authors concluded.

And it is odd, others have noted, that if the Solutreans survived the hazardous trip, they appear to have left essentially no mark other than a few stone points. Meltzer, in an oft-quoted passage from his book *First Peoples in a New World: Colonizing Ice Age America*, put it this way: “If Solutrean boat people made landfall in America, they must have suffered instant and almost total cultural amnesia; and, for that matter, genetic, dental, linguistic, and skeletal amnesia as well. Perhaps it was the stress of the voyage?”

Similarly hostile jibes have also greeted the publication of *Across Atlantic Ice*, which deepens but largely restates the original case for the Solutrean hypothesis. Meltzer, for example, said Stanford and Bradley “just cherry pick data that supports them, and ignore to the point of willfulness the many criticisms that have been made of their claim.”

But such critiques don’t seem to have deterred the authors. “When scientists start believing something, there is a lot resistance and that is what we’ve faced,” said Bradley, noting that the pair is pushing a “fundamental paradigm shift.” The “resistance has made us get better evidence and make a stronger case.” Indeed, the pair spent 10 years writing *Across Atlantic Ice* (in a particularly memorable moment, they finished one early chapter just as the terrorist attacks of September 11, 2001 unfolded). Along the way, they’ve had to constantly update the manuscript, as researchers generated new data.

In particular, they note, there are now five North American sites, including Meadowcroft Rockshelter, Cactus Hill, and two sites found by archaeologist Darrin Lowery along the Chesapeake Bay in Maryland, Miles Point and Oyster Cover, that have yielded artifacts that appear to “significantly predate Clovis and overlap with Solutrean.” (In contrast, there are still none in the Arctic, they note.) And the book includes an extensive statistical and qualitative comparison of Solutrean and Clovis artifacts that, they assert, only

DARRIN LOWERY

J. M. ADONASIO



A stratigraphic section at the Miles Point site on the Chesapeake Bay showing an anvil stone in the lower right corner. The anvil stone was associated with a hammerstone, two blades, and a blade core.



A comparison of Solutrean laurel leaf bifaces (top row) with similar bifaces (bottom row) found in submerged contexts in the Chesapeake Bay region.

strengthens their case for similarity.

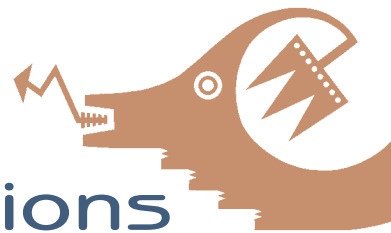
They've also reworked their thinking about the migration route, in light of better paleoclimate data. They now picture the Solutreans making relatively short hops along a northern ice edge, stopping to dry out their boats, draw potable water from fresh meltwater lakes on the ice surface, and harvest fish, birds, and marine mammals. And they speculate that these small, relatively isolated groups left Europe during the "middle Solutrean" between 19,000 and 23,000 years ago, and ultimately mixed with other immigrants arriving from Asia. "We do not envision an immediate rush of immigrants to colonize newfound lands," they wrote.

And what about those boats? Probably gone forever: "Boats, unlike stone points, are fragile and unlikely to survive thousands of years," they wrote. "Even if they did, most places one is likely to find them are now hundreds of feet below sea level." The melting of the great glaciers about 13,000 years ago raised sea levels by some 400 feet, and they argue that this may explain why there is so little physical evidence of the Solutrean immigrants, who likely kept to

the coasts. Those old "shorelines are out there and they are under the ocean in most places quite deeply," said Bradley. "This is where we need to be looking for our evidence for the first peopling."

Soon, that is exactly what Bradley and Stanford plan to be doing. They've gotten funding to set out to sea themselves, in search of a spot off the Chesapeake Bay where, in 1970, a fishing boat named the *Cinmar* dredged up an elegant, leaf-shaped Solutrean-looking stone blade and a mastodon bone. A drowned Solutrean encampment may still be there, Stanford said, waiting to yield new evidence of an ancient migration. The voyage isn't without risk, he admitted: he's never really been to sea, and doesn't know if he'll get seasick. But after the rough trip the Solutrean hypothesis has experienced over the last 15 years, Stanford's not worried. "It's been an exciting journey," he said, "and it's just begun."

DAVID MALAKOFF is a science writer living in Alexandria, Virginia. His article "Revealing The Past Through DNA" appeared in the Winter 2011-12 issue of *American Archaeology*.



new acquisitions

Discovering Cultural Resources

When a donor offered a large tract of land with no record of archaeological sites, the Conservancy conducted a surface survey to determine if it contained cultural resources. Having found evidence of prehistoric occupation, the Conservancy established its newest preserve in California.

In July of 2011, Virginia Fast contacted the Conservancy about donating some property that she and her two sisters, Margaret Van Boer and Susanne Obaid, inherited. The 160-acre parcel in northeast California was originally purchased by their parents, Richard and Virginia Fast, in 1953.

The Fast parcel is tucked away in the beautiful Modoc National Forest, covered by an abundance of volcanic rock, western juniper, and Jeffrey pine. The property contains tall rimrocks and rocky slopes and flats, known locally as scabflats. There are several active springs in the area, and these collect in a small, perennial stream that flows due south.

A search of the archaeological records revealed no previously recorded sites on the property, so a survey was required to determine if it contained the



A survey of the Fast site identified lithic artifacts in areas such as this one.

archaeological resources necessary for the Conservancy to accept the donation, and Greg White of Sub Terra Consulting was hired to conduct it. Shortly after being contacted by Virginia Fast, Cory Wilkins, the Conservancy's Western regional director, accompanied White as he searched the rugged property looking for significant cultural deposits.

White and Wilkins identified a number of archaeological resources, including a lithic scatter found in the spring drainage and scabflat, rockshelters with associated artifacts along the rimrock, a large residential site at the edge of a portion of rimrock near a spring, and stacked rocks that could be features. Though they

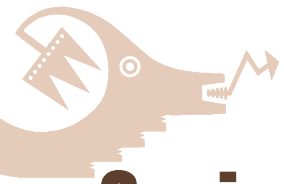
found prehistoric cultural materials throughout the property, they were unable to draw any conclusions about occupation dates.

"Our archaeological reconnaissance results provide a solid basis to argue for acquisition of the Fast property," White wrote in his report of the survey. "I believe the property is likely to yield data sets important to the development of regional prehistory. The property and its cultural yield offer research opportunities" such as "combining ecological and cultural interpretations of the prehistoric past."

Last March the Conservancy accepted the generous donation of the Fast property. —Cory Wilkins

CORY WILKINS





Saving an Earthwork from Development

The Oberting-Glenn site could have been destroyed by residential development, but the landowners chose to preserve Indiana's lone hilltop earthwork enclosure.



JOSH MCCONAUGHY

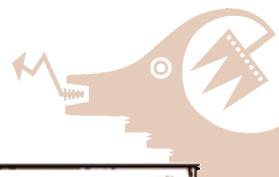
Located west of Cincinnati, Ohio, the Oberting-Glenn site overlooks the confluence of the Great Miami and Ohio rivers.

The Great Miami River Valley snakes through southwestern Ohio and eastern Indiana and boasts a large number of important archaeological sites. Some of the best-known sites in this area are associated with the Middle Woodland period from about 100 B.C. to A.D. 500, the time of the Hopewell Culture. Huge geometric earthworks, conical burial mounds, and earth and stone hilltop enclosures were constructed during this period and are still visible today as reminders of the people that once lived here. After A.D. 500 it seems that the Hopewell stopped building and using these ceremonial sites.

The Oberting-Glenn hilltop enclosure is situated high on a ridge top in southeast Indiana overlooking the confluence of the Great Miami and Ohio Rivers. This is the only

known hilltop earthwork enclosure in Indiana. The earthwork, which has been disturbed by erosion and agriculture, consists of earth and stone walls that are four-feet high in places. These walls enclose a central mound that is five-feet tall and has a diameter of 60 feet. A spur of three mounds that extends to the northeast and one other mound to the northwest are also components of this site, which offers breathtaking views of the Great Miami River and the Ohio River valleys.

One of the earliest recorded accounts of this earthwork was produced by a Samuel Morrison, along with a sketch of the site, in 1885: "When I first visited the ancient fort north of Hardinsburgh, was in 1816, I was then a school boy attending school in an old round log schoolhouse on the hillside

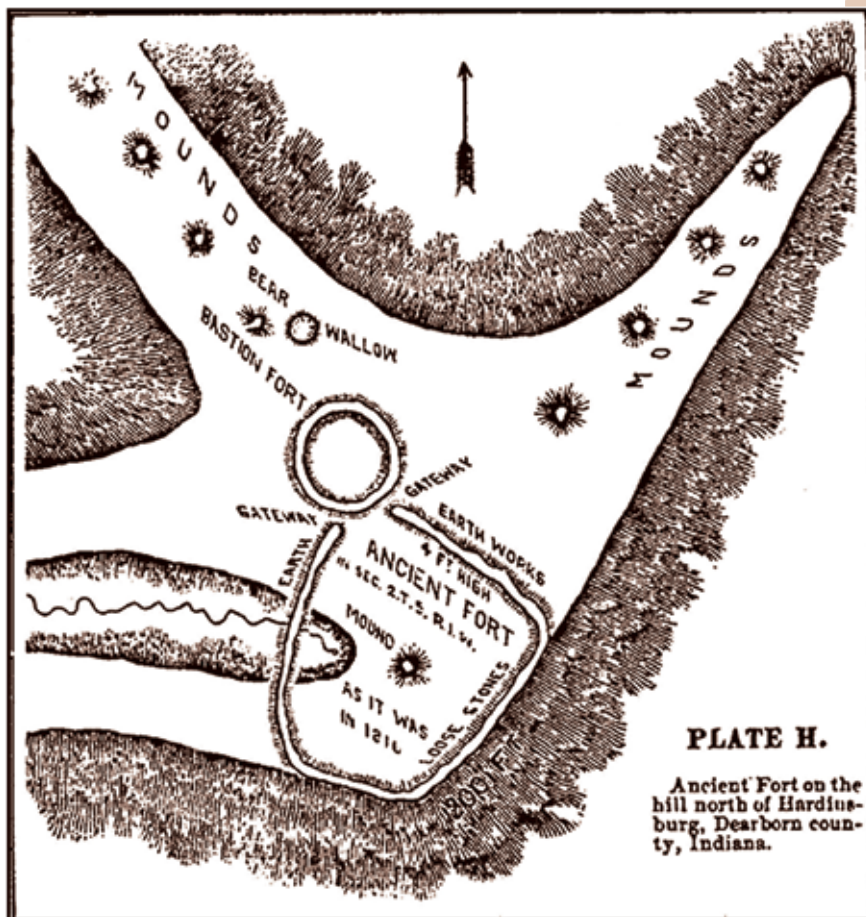


about fifty feet above the overflowed bottom land, about 350 yards from and below the fort. At this period, not a tree on the hillside nor on top of it, which was occupied by the fort, had been disturbed; they stood in all the primitive greatness. The outlines of the embankment or parapet of the fort were easily defined, being on an average of four feet in height, and were constructed only of earth, except on the southeast brow of the hill; the wall for 100 yards was composed of loose stones, some of them quite large In the midst of the fort there was a mound at least six feet high. The west parapet...was at least eight feet high.... I found in the fort several beautiful stone axes, made of a hard, green speckle stone, highly polished."

Glenn Black of Indiana University at Bloomington also visited the site in 1934 as part of his archaeological survey of the region. Informed by Morrison's description and sketch, Black reported the condition and dimensions of the site. But little scientific research was done until this century. Jeannine Kreinbrink directed a cultural resource survey of the property in 2006 while with N&E Environmental Solutions. The survey was conducted because a local developer was considering converting the area into a subdivision. During this study, Kreinbrink conducted intensive shovel testing and remote sensing to map the entire earthwork. "Our most important task was to determine the site's boundaries," she said. Her research has clearly defined the site's dimensions.

The Glenn and Collins families have owned this important site for many years. (The first part of the site's name, Oberting, comes from the road the property is on.) It was primarily taken care of by the late George Glenn, and he took pride in owning such an important archaeological site. Michael Glenn and Barbara Collins, George's children, have continued to care for the site since his death. There was a chance that the earthwork could have been destroyed by building the subdivision,

american archaeology



Samuel Morrison's sketch of the earthwork as it appeared in 1885.

but the owners wanted to preserve it, and they have been working with the Conservancy for many years toward that end.

A 30-acre parcel that includes the earth and stone embankments and the spur of mounds to the northeast will be purchased by the Conservancy for

\$300,000, ensuring that this irreplaceable hilltop enclosure will be preserved indefinitely. The Collins and Glenn families have also generously agreed to donate an additional 10 acres to the Conservancy as a buffer to make sure the site is well protected.

—Josh McConaughy

CONSERVANCY Plan of Action

SITE: Oberting-Glenn

CULTURE AND TIME PERIOD: Hopewell
(100 B.C. — A.D. 500)

STATUS: Threatened by development

ACQUISITION: The Conservancy needs to raise \$300,000 to purchase the 30-acre parcel. Ten additional acres are being donated.

HOW YOU CAN HELP: Please send contributions to The Archaeological Conservancy, Attn: Oberting-Glenn, 5301 Central Ave. NE # 902, Albuquerque, NM 87108-1530.





Preserving A 16th-Century Iroquois Village

The Conservancy adds another site to its Iroquois Preservation Project.



KATHLEEN ALLEN

Kathleen Allen's students map a feature at the Carman site during a field school in 2006.

The Carman site is a 16th-century Late Woodland period Cayuga Iroquois village situated in the Finger Lakes region of central New York, between Lake Seneca and Lake Cayuga. Carman is located near the Town of Trumansburg, and in close proximity to the Indian Fort Road site, another Late Woodland Cayuga village the Conservancy is attempting to acquire (See "Preserving An Unusual Village," Spring 2012).

The Carman and Indian Fort Road village sites, together with the Klinko and the Parker Farm sites, appear to represent a sequence of occupations by a group of Cayuga that moved from north to south. While the majority of the Cayugas appear to have lived on the east side of Lake Cayuga, this smaller community on the west side of the lake seems to have been in the area from A.D. 1450 to the late 1500s.

The Carman site was named after one of the early property owners in the region. Like most of these village sites found across New York State, the local people have long

known of it, and consequently some have collected artifacts from the surface. A historic marker was placed at the site by New York State in the 1930s to signify the importance of the property.

In the 1960s and '70s, Marian White at the University of Buffalo documented several sites in the Cayuga Lake region, one of which was Carman. Then in 1993, Kathleen Allen at the University of Pittsburgh, while directing a field school, conducted the first excavations at Carman. She returned to the site several times over the next 15 years. In addition to her excavations, Allen has also conducted interviews with artifact collectors in the area, and examined collections from Carman that include ground stone tools, decorated pottery, and disc shell beads.

"Based on what we have recovered from the Carman site, the village appears to date to the late 1500s," Allen said. "Though we have not found evidence of a palisade at Carman, two structures have been identified, as well as many



KATHLEEN ALLEN



Field school students screen excavated dirt in search of small artifacts.

other postmold and small pit features.”

The high proportion of lithics and unburned bone found at the site have led Allen to believe that it may have been a focal point for men’s activities, such as hunting. “As it is located in an upland area, it is close to habitats where deer would be plentiful. While the vast majority of faunal remains are of deer, relatively few elements have cut marks on them, said Allen. “There are more formal tools at Carman and more expedient tools at the Parker Farm site. This supports evidence for greater emphasis on activities associated with men at Carman. But there is clearly evidence for women’s activities as well.”

Unlike the Parker Farm site, which has a dispersed settlement pattern, the pattern at Carman appears to be dense. And unlike the Indian Fort Road site, which has a clear evidence of a palisade as well as earthen features, Carman has neither.

Carman’s artifact assemblage contains lithics, pottery, and bone, although the proportions of lithics and unburned bone are much higher here than at Parker Farm. Large amounts of charred nutshell fragments were found in one feature. Allen hopes that additional botanical analysis will provide more information about the foodstuffs and organic materials found at the site. She also plans to use remote sensing next summer in an attempt to identify the number of structures and to search for a palisade.

The site’s excellent condition is due to the efforts of the property owners, Peggy Billings and Mary Lou VanBuren, who protect it from trespassers. They also asked Allen to investigate the site. “For several years, they invited the students to their house for a picnic on an evening during the field school and they encouraged me to have an open house at the site one year and invited the local community to attend,” Allen said. “This kind of relationship with land-owners is very special.”

Billings and VanBuren thought it was a great idea when
american archaeology

the Conservancy approached them about acquiring the site. The Conservancy currently has a one-year option to purchase 20 acres containing the entire village. The Carman site, together with Indian Fort Road and the Newton-Hopper sites, are all current acquisitions that the Conservancy has pursued under our Iroquois Preservation Project.

—Andy Stout

CONSERVANCY Plan of Action



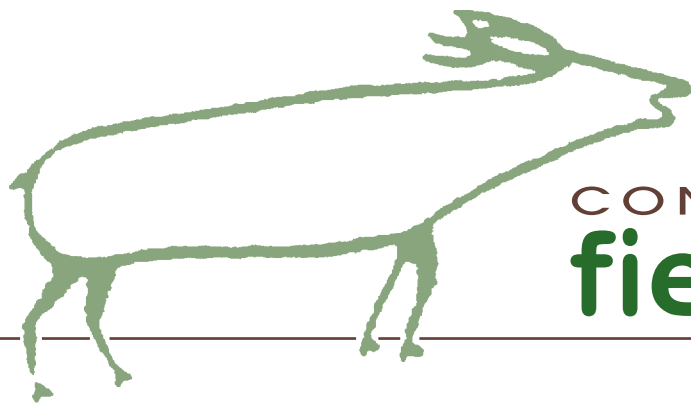
SITE: Carman

CULTURE AND TIME PERIOD: Cayuga Iroquois
(16th century Late Woodland)

STATUS: Conservation-minded owners want to preserve site

ACQUISITION: The Conservancy is raising \$500,000 for its new Iroquois Preservation Project.

HOW YOU CAN HELP: Please send contributions to The Archaeological Conservancy, Attn: Iroquois Preservation Project, 5301 Central Ave. NE # 902, Albuquerque, NM 87108-1530.



CONSERVANCY field notes



Tour participants walk past a golf course on the way to the Rosenstock site.

ELLEN GEORGI

The Conservancy Hosts Tour of the Rosentock Preserve

EAST—The staff of the Conservancy's Eastern region office recently hosted a tour of the Rosenstock Preserve as part of Maryland's Archeology Awareness Month. The tour was attended by members of the Archeological Society of Maryland (ASM), the Monocacy Archeological Society, and current and former Maryland Historical Trust (MHT) archaeologists Maureen Kavanagh and Tyler Bastion.

Rosenstock was preserved through a cooperative effort between Aldi Inc., the City of Frederick, and the Conservancy. The site features an extraordinary well-preserved Late Woodland village dating from A.D. 1300-1450 with artifacts

that are rarely found east of the Mississippi and Ohio River valleys.

For many of the participants it was their first opportunity to visit the site since they had taken part in the research conducted by the ASM and the MHT in 1979, and then from 1990 through 1992. The group recounted many stories from their experiences then, which included finding structures and the discovery of a pit containing unfired raw clay for ceramic production. They also saw how the site has changed over the last 20 years as well as what the Conservancy has done to manage it.

Michel and Walker Win Preservation Award

SOUTHWEST—Mark Michel and Jim Walker received the 2012 Stephen H. Hart Award For Archaeology this February. The annual Hart awards recognize outstanding projects and individual achievements in historic preservation throughout Colorado. Michel, the Conservancy's president, and Walker, vice president and Southwestern regional director, were honored by the Colorado Historical Society for "a lifetime of service to preserve some of the most significant, yet most threatened, archaeological properties" in the state.

The Conservancy has acquired 18 sites in Colorado, six of which were purchased using State Historical Fund grants. The Conservancy has also assisted a number of individuals and preservation organizations that are protecting Colorado's archaeological heritage.

The Historical Society also lauded Michel and Walker for preparing a number of National and State Register of Historical Places nominations and



Edward C. Nichols (left), the president of History Colorado, presents the Stephen H. Hart Award For Archaeology to Jim Walker.

for helping to develop and fund site management plans, easements, and educational materials.

The Colorado Historical Society

began presenting the Stephen H. Hart Awards in 1986. The awards are named after Colorado's first state historic preservation officer.

American Archaeology Article Wins National Prize

The article "The Battle For The Dunkirk Schooner," which appeared in the Fall 2011 issue of *American Archaeology*, won the Society For American Archaeology's Gene S. Stuart Award.

The award, which is in memory of the late Gene S. Stuart, a writer and managing editor of National Geographic Society books, honors outstanding efforts to enhance public understanding of archaeology. The award is given to the most interesting and responsible original story or series about any archaeological topic published in a newspaper or magazine.

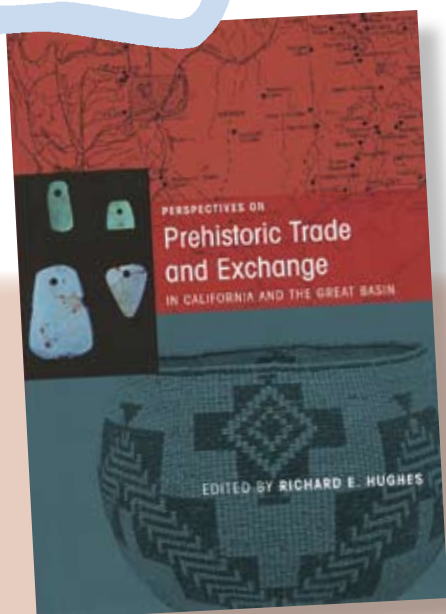
"The Battle For The Dunkirk Schooner" is about the legal contest between a private salvage firm that wants to raise a 19th-century shipwreck from the bottom of Lake Erie and the State of New York, which wants the wreck to be preserved there. The award carries a \$2,000 prize, which was given to the author, Mike Toner, a freelance journalist. Toner also won the award in 2001.



The Dunkirk Schooner sits at the bottom of Lake Erie.



Reviews



Perspectives on Prehistoric Trade and Exchange in California and the Great Basin

Edited by Richard E. Hughes

(University of Utah Press, 2012; 273 pgs., illus., \$50 cloth; www.UofUPress.com)

This collection of 13 essays examines prehistoric trade in California and the Great Basin, focusing on how material got from its source of origin to the place where it was recovered by archaeologists. Despite the vast distances and harsh terrain of the region, material goods did in fact travel great distances and in rather large quantities.

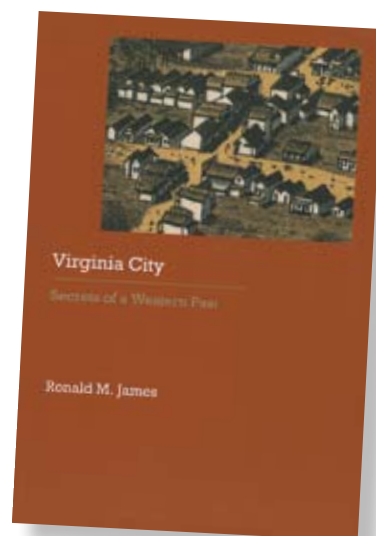
While this is a very basic archaeological question, it is one of great importance in understanding prehistoric cultures.

Each of the contributors describes the circumstances and conditions under which trade, direct access, and mobility account for the conveyance of material goods across varying distances and at different times. They also evaluate competing hypotheses about the human behaviors responsible for the movement of goods. Methods for identifying sources are covered in depth. This volume is an important contribution to a critical issue in American archaeology.

Virginia City: Secrets of a Western Past

By Ronald M. James

(University of Nebraska Press, 2012; 176 pgs., illus. \$17 paper; www.nebraskapress.unl.edu)



Virginia City begins with the story of a tiny bottle that was smashed to pieces in the African-American Boston Saloon. It was excavated by the author's 14-year-old son, who recovered 21 small pieces including an embossed base with the brand name Tabasco Pepper Sauce. Archaeologists were able to date it to the early 1870s, making this bottle the earliest yet found from the famed Louisiana sauce company. How it got to Nevada is still a mystery. This is just one of the tales in this delightful book, which tells the story of one of the Wild West's most important mining towns.

Author Ronald James, along with hundreds of volunteers, students, and professional archaeologists, has been prying loose the secrets of Virginia City, Nevada, from the ruins of old buildings, trash piles, and cemeteries for several decades. Beginning as a mining camp for a few lucky individuals in 1859, it was one of the richest places on earth, attracting more foreign-born residents per capita than any other place in the United States. It was home to corporate executives, middle-class families, skilled craftsmen, miners, prostitutes, and barkeepers to name a few. Native Americans, Chinese, and recently freed slaves from the South added to the mix.

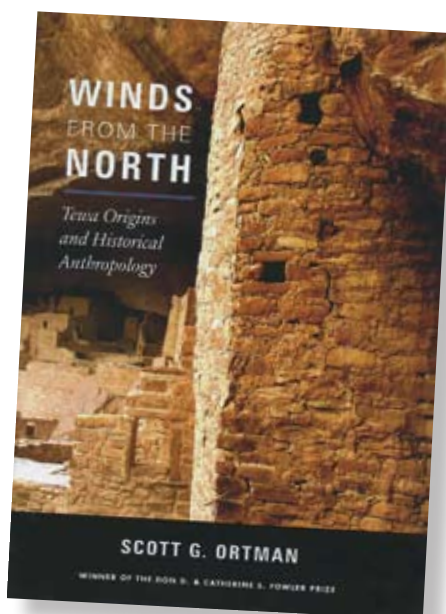
Their stories are emerging as the researchers continue to explore the town. More than 30,000 artifacts have been recovered from a single drinking establishment known as the Boston Saloon. The Shooting Gallery and Saloon has yielded thousands of spent cartridges and bullets. More surprising is a delicate teapot lid and cup, ornate women's buttons, and a collection of crystal bottle stoppers. These are the kinds of details the historical record fails to tell.

Historical archaeology combines historical research with archaeological discovery of material remains, and Virginia City is an ideal place to apply this discipline. Employing these methods, this volume tells the story of a great Western boom and bust town. James, who also serves as Nevada's state historic preservation officer, pulls together the results of numerous digs and study projects into an engaging story of the famed frontier town. Written for the general reader, it's a hard book to put down.

Winds from the North: Tewa Origins and Historical Anthropology

By **Scott G. Ortman**

(University of Utah Press, 2012; 485 pgs., illus., \$70 cloth; www.UofUpress.com)

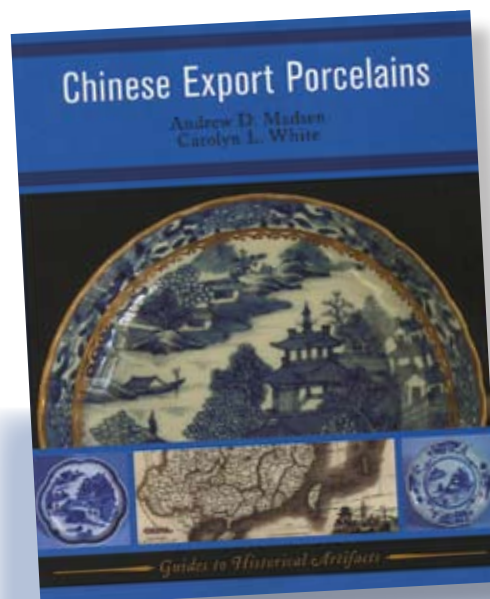


Perhaps the most enduring controversy in Southwestern archaeology is what happened to the people who abandoned Mesa Verde and the Four Corners region in the late 13th century. By A.D. 1300 some 25,000 people who lived there for hundreds of years were gone—never to return. At about the same time, people in the Tewa area of the northern Rio Grande Valley north of Santa Fe coalesced into large towns, seemingly indicating a major population expansion. Generations of archaeologists have been taught that the Mesa Verdeans immigrated to the Rio Grande to form what became the eight modern Tewa/Tiwa pueblos—including Santa Clara, Nambe, and Taos. This view is hotly contested by archaeologists who argue that there is little evidence to support this conventional wisdom.

In this volume, Scott Ortman, late of Crow Canyon Archaeological Center in Cortez, Colorado, makes the strongest case yet for a large-scale migration from the Four Corners to the Rio Grande in the late 1200s. Working systematically, Ortman builds his case using genetic, linguistic, and cultural heritage evidence including oral traditions and material culture. For example, he compares skull measurements from the Four Corners to those of the Rio Grande and finds a high degree of similarity among some 900 individuals. On the other hand he finds much less similarity with pre-1200 Rio Grande skulls.

Ortman contends that as the people migrated from Mesa Verde they underwent a striking social transformation resulting in a unique hybrid of ideas and practices in the resulting Tewa culture, including a new religion. He also argues that the Tewa language came from the Four Corners.

Winds from the North is a very important addition to the scholarship of Southwestern archaeology. It makes the strongest argument yet to support the commonly held belief that the people of Mesa Verde and the Four Corners migrated to the Rio Grande Valley. Not everyone, however, will be convinced, and this debate will continue for years to come.



Chinese Export Porcelains

By **Andrew D. Madsen
and Carolyn L. White**

(Left Coast Press, 2011; 157 pgs., illus., \$89 cloth, \$25 paper; www.LCoastPress.com)

Archaeologists heavily depend on ceramics, both prehistoric and historic, to identify and date cultural deposits. They are virtually indestructible, retaining designs and colors centuries longer than most materials. As the 18th century progressed an increasing number of English and colonial Americans, both city dwellers and rural folk, came to use and possess blue and white Chinese porcelains, a commodity that was affected by the vagaries of style and fashion.

In this copiously illustrated volume, authors Madsen and White provide a comprehensive guide to the identification and manufacture dates of export Chinese porcelain. They also offer a broad overview of the industry and context information for the most common styles. Motifs are dated by using information from shipwrecks from the 17th through 19th centuries, well-dated archaeological assemblages such as that from Williamsburg, Virginia, and museum collections. This volume is an indispensable handbook for collectors, students, and historical archaeologists, and it is also a notable study of an important art form. —Mark Michel



The Archaeological Conservancy

Expeditions

French and Indian War Tour

When: September 8 – 15, 2012

Where: New York, Pennsylvania, Maryland

How Much: \$1,695 (\$295 single supplement)

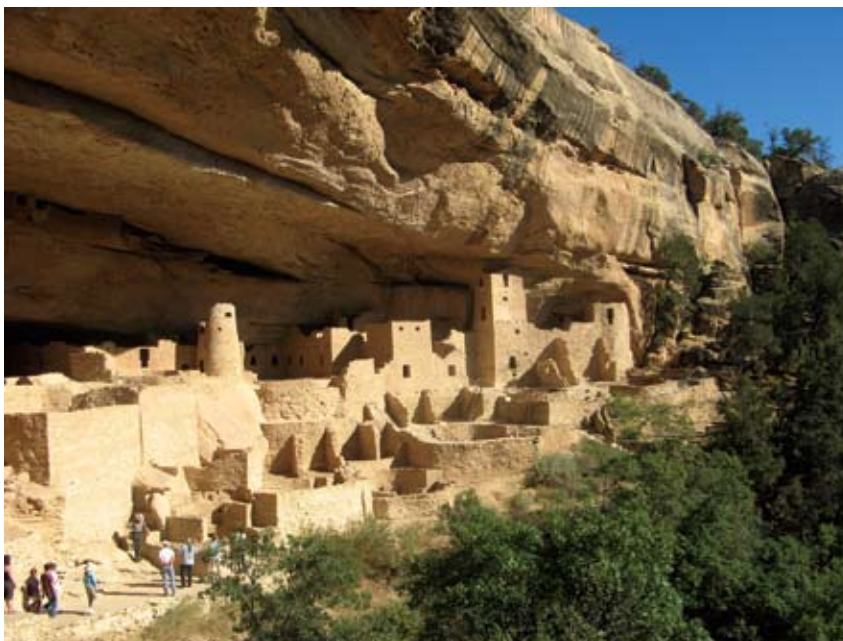
Join us as we travel across New York and Pennsylvania to explore the rich history and archaeology of the French and Indian War. This epic struggle involving Native Americans, the English and French Empires, and Colonial forces was one of the first global conflicts and a defining moment in American history.

On our journey we'll meet historians, archaeologists, and native people at a variety of archaeological sites, museums, and interpretive centers. Some of the destinations we'll visit are Fort Niagara State Historic Site, Fort Ticonderoga, Fort Stanwix National Monument, Roger's Island, and Ganondagan State Historic Site.



Fort Stanwix National Monument in Rome, New York, is among the many highlights of the tour.

NPS



Mesa Verde National Park offers approximately 600 cliff dwellings, including Cliff Palace.

Best of the Southwest

When: September 22 – October 2, 2012

Where: New Mexico, Arizona, and Colorado

How Much: \$2,595 (\$395 single supplement)

The American Southwest is home to some of the best-preserved evidence of prehistoric civilizations in the New World. The magnificent ruins of Chaco Canyon and Mesa Verde are but two vivid reminders of the complex cultures that dominated the region between the 10th and 14th centuries. The Conservancy's Best of the Southwest tour includes these two settlements as well as other prehistoric sites and modern pueblos where ancient traditions persist.

JIM WALKER

Oaxaca

When: October 26 – November 5, 2012

Where: Mexico

How Much: \$2,595 (\$275 single supplement)

Join us in Oaxaca, Mexico during one of the most unusual festivals anywhere—the Day of the Dead. On this day, people prepare home altars and cemeteries to welcome the dead, who are believed to return to enjoy the food and drink they indulged in during life. Rather than a morbid occasion, this is a celebratory event.

Our tour explores the Mixtecan and Zapotecan sites in the region, including Mitla, Monte Albán, San José Mogote, and Dainzú. You'll have the opportunity to explore

Oaxaca's museums and markets as well as several crafts villages featuring weaving, pottery, carved animals, and other local art.



Monte Albán is one of the oldest cities in Mesoamerica, dating to approximately 500 B.C.

UPCOMING TOURS — WINTER 2013



Belize and Tikal

Our tour begins on the coast of Belize, where you'll tour Belize City, see Altun Ha, and take a boat ride up the New River to Lamanai, a Maya trading center established before Christ and occupied until A.D. 1641. From the coast you'll travel to the inner reaches of the country and explore the splendid mountaintop palace of Cahal Pech.

A ferry will take you to the ruins of Xunantunich, once an important trading center. There you'll tour El Castillo, a classic example of the Maya technique of constructing a pyramid over an older pyramid. From Xunantunich you'll visit the recently excavated ceremonial site of Caracol, the largest Maya site in Belize. You'll also visit Yaxhá, a city 19 miles southeast of Tikal that features an impressive series of plazas and platform groups. At Tikal, you'll spend two days exploring one of the most magnificent Maya centers situated in the Petén rain forest. Thought to have had a population exceeding 75,000, Tikal once spanned an area of more than 25 square miles.

Archaeologist John Henderson points to El Castillo, a huge pyramid at Xunantunich in Belize.

Maya of Chiapas and Tabasco

This tour takes us to some of the more out-of-the-way but spectacular Maya ruins in southern Mexico that flourished between A.D. 300 and 900. We begin in the tropical lowlands and end in the fabulous highlands of Chiapas among the modern Maya people. We'll see tremendous pyramids, unbelievable sculptures and murals, and modern arts and crafts.

We begin our adventure with a visit to the major Olmec site of La Venta with its great earthen pyramid. We will then visit Comalcalco, Palenque, Bonampak, and Yaxchilán. Then we leave the tropical lowlands for a long climb into the Chiapas mountains to the large Maya center of Toniná. The site is dominated by its acropolis, which rises in terraces and buildings some 233 feet up the side of a steep hill. We'll continue climbing to reach the colonial-Indian town of San Cristóbal de las Casas, where we'll spend two nights. We'll then visit the charming Tzotzil Maya villages of San Juan Chamula and Zinacantan.



Palenque's magnificent ruins make it a popular destination. The city's palace is seen in the upper right of this photo.



Patrons of Preservation

The Archaeological Conservancy would like to thank the following individuals, foundations, and corporations for their generous support during the period of February through April 2011. Their generosity, along with the generosity of the Conservancy's other members, makes our work possible.

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Gifts of Distinction

The Anasazi Circle is an elite group of members who contribute \$2,000 or more annually to The Archaeological Conservancy's ongoing efforts to permanently preserve America's cultural treasures. Since its inception in 1993, participation in the Anasazi Circle has increased by over 267 percent.

Anasazi Circle member support is essential to the Conservancy's ability to continually expand its preservation goals. It is crucial to preserve information regarding our nation's past so we can better understand it. Cultural evidence is often destroyed before proper analysis can be done, and

the knowledge is lost forever. The Conservancy uses donations to act quickly to protect a site and prevent significant information from being destroyed.

Benefits of Anasazi Circle membership include discounts on tours, recognition in *American Archaeology*, an award-winning magazine, and an invitation to an exclusive seminar weekend this October in Little Rock, Arkansas, where you'll learn more about the peoples of the Lower Mississippi Valley. By sending in your donation of \$2,000 or more today, you can ensure your invitation to the Conservancy's 2012 Anasazi Circle.

American Archaeology Magazine On The Web

You can now read complete back issues of *American Archaeology* on the Web.

The available issues range from Spring 1997, *American Archaeology*'s debut issue, to Summer 2010. There will be a two-year lag between the most recent print and Web issues.

American Archaeology also has a subject index on the Web that is searchable by key word as well as a list of all the books that have been reviewed in the magazine.

www.americanarchaeology.org

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W. MICHAEL GEAR AND KATHLEEN O'NEAL GEAR

NORTH AMERICA'S
FORGOTTEN PAST

People of the River

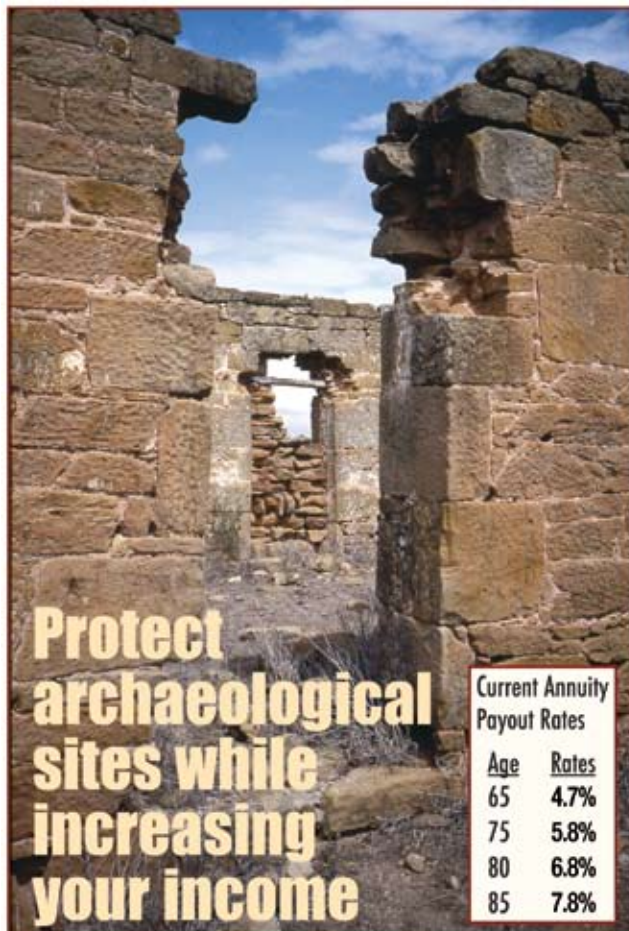
One of the greatest cities of the world, Cahokia was larger than London was in AD 1250.

Learn more about this ancient city by listening to this GraphicAudio production.

History of the Cahokia Mound Builders of the Mississippi Basin

A gripping new saga of pre-historic America that takes us to the Mississippi Valley and the tribe known as the Mound builders. In Cahokia, the corn crop is failing again and a warchief—and the warrior woman he may never possess—are disgusted by their Chief's lust for tribute. If the gods have abandoned the people, there is no hope—unless it comes in the form of a young girl who is learning to Dream of Power.

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Some Conservancy members think the only way to help save archaeological sites is through membership dues. While dues are a constant lifeline, there are many ways you can support the Conservancy's work, both today and well into the future. And by supporting the Conservancy, you not only safeguard our past for your children and grandchildren, you also may save some money.

OLD FORT EARTHWORKS, MIDWEST REGION

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